



NATURALIST'S REPOSITORY,

OR

Monthly Miscellany

OF

EXOTIC NATURAL HISTORY:

CONSISTING OF

ELEGANTLY COLOURED PLATES WITH APPROPRIATE SCIENTIFIC
AND GENERAL DESCRIPTIONS

OF THE MOST CURIOUS, SCARCE, AND BEAUTIFUL

PRODUCTIONS OF NATURE

THAT HAVE BEEN RECENTLY DISCOVERED

IN VARIOUS PARTS OF THE WORLD;

AND MORE ESPECIALLY SUCH

NOVELTIES

As from their extreme Rarity remain entirely undescribed, or which have not been
duly noticed by any preceding Naturalists.

THE WHOLE COMPOSED ACCORDING TO

THE LATEST IMPROVEMENTS IN THE VARIOUS DEPARTMENTS OF

The Science,

AND FORMING COLLECTIVELY A TRULY VALUABLE

COMPENDIUM OF THE MOST IMPORTANT DISCOVERIES

OF

QUADRUPEDS, BIRDS, FISHES, INSECTS, SHELLS,
MARINE PRODUCTIONS,

AND EVERY OTHER INTERESTING OBJECT OF NATURAL HISTORY,

THE PRODUCE OF FOREIGN CLIMATES.

BY E. DONOVAN, F.L.S. W.S. &c.

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THE
NATURALIST'S REPOSITORY,

&c. &c. &c.

MAMMALOGY.

PLATE LXXIII.

RATTUS DONOVANI

DONOVAN'S RAT

GLIRES.

GENERIC CHARACTER.

Upper fore-teeth cuneated : grinders three, rarely two each side
each jaw : clavicles or collar bones perfect.

VOL. III.

B

PLATE LXXIII.

SPECIFIC CHARACTER.

Tail moderate and somewhat hairy : body varied with fuscous, black and cinereous, and three pale dorsal stripes.

RATTUS DONOVANI: cauda mediocri subpilosa : corpore ex fusco nigro cinereoque vario, et fasciis tribus dorsalibus pallidis.

A new species of the Rat tribe ; a native of the Cape of Good Hope, from whence it was brought to this country by Capt. White. This animal partakes somewhat of the appearance of our wood rat, *Mus Arvalis**, but is larger, and has the tail of a moderate length, instead of being short, as in that species ; the head is longer and somewhat pointed as in the common brown rat, *Mus Decumanus* †, or rather like the black rat *Mus Rattus* ‡, but in its proportionate robustness it bears the nearest similitude to the first mentioned species. The length of the body from the tip of the nose to the base of the tail is five inches and three quarters, the tail of a moderate length in proportion, and slightly hairy. The fur is blackish, varied with grey and fuscous hairs, and some slight intermixture of a fulvous hue : the three broad dorsal bands paler, the intermediate spaces

* *Mus Arvalis.* *Donovan's British Quadrupeds*, vol. 2. pl. 33.

† *Mus Decumanus.* *Don. Brit. Quad.* vol. 2. pl. 29.

‡ *Mus Rattus.* *Don. Brit. Quad.* vol. 1. pl. 15.

MAMMALOGY.

dark and forming four distinct blackish bands ; the ears are short and rounded : the anterior legs short, with the feet small and furnished with five toes, the interior one of which is very short ; the posterior legs are rather long, and have three long toes in the middle, with a short exterior toe and an interior one yet smaller.

The dorsal stripes in this species of rat are in a peculiar degree remarkable and characteristic. In this respect there is a distant similarity between this animal and the small lineated mouse, described by Sparrman under the name of *Pumilio*, and which is also a native of the same part of Africa. The latter is however the smallest of the mouse tribe, being only two inches in length from nose to tail. The general similarity which seems at the first view to prevail between those two animals may possibly suggest an idea of the former being the young of the present species ; but without resting too implicitly on the great disparity of size and other slighter differences, the head in our present species is much larger, the snout more pointed, the ears more approximate, and the posterior feet not precisely correspondent, the two exterior toes being shorter in proportion than in the diminutive little creature which Sparrman has designated under the name of *Mus Pumilio*.



ORNITHOLOGY.

PLATE LXXIV.

ORIOLOUS AMERICANUS

RED-BREASTED ORIOLE

OR

CAYENNE MOCKING-BIRD

PICÆ.

GENERIC CHARACTER.

Bill conic, convex, very acute and straight : superior mandible rather longer and obsoletely notched : tongue bifid and sharp-pointed. Feet formed for walking.

SPECIFIC CHARACTER

AND

SYNONYMS.

Black ; chin, throat, breast, and upper angle of the wings red.

PLATE LXXIV.

ORIOLOUS AMERICANUS : niger, mento, jugulo, pectore alarum-
que angulo superiore rubris. *Gmel. Syst. Nat.*
1. p. 2. 386.

Red-breasted Indian Black-bird. *Will. Orn. p. 194. n. 7.*

Mocking-bird of Guiana. *Bancr. Guj. p. 177.*

Red-breasted Oriole. *Lath. Syn. 1. 2. p. 430. n. 14.*

This species is a native of South America, and is not uncommon in Guiana and Cayenne ; it has obtained the name of the Mocking-bird from the facility and excellence with which it imitates the notes of other birds ; its appearance is remarkable, the beautiful scarlet colour of the throat, breast and abdomen forming a striking contrast with the deep black and fuscous glossy tints of the superior parts of the plumage.

The length of this species is about seven inches. It is one of those kinds which builds a long cylindrical nest, and which for better security against the voracious intruders with which its forest haunts are infested, is placed at the extremity of the higher branches of the loftier trees.



ENTOMOLOGY.

PLATE LXXV.

PAPILIO THERSANDER

THERSANDER BUTTERFLY

LEPIDOPTERA.

GENERIC CHARACTER.

Antennæ thicker towards the end ; wings erect when at rest.

Fly by day.

SPECIFIC CHARACTER

AND

SYNONYMS.

Wings obtusely tailed, fuscous : with a band and macular streaks of yellow : posterior pair beneath chesnut brown in the disk with black lines.

PAPILIO THERSANDER : alis obtuse caudatis fuscis : fascia strigisque macularibus flavis, posticis subtus disco brunneo nigro lineato. *Fabr. Ent. Syst. T. 3. p. 1. 32. 93.*

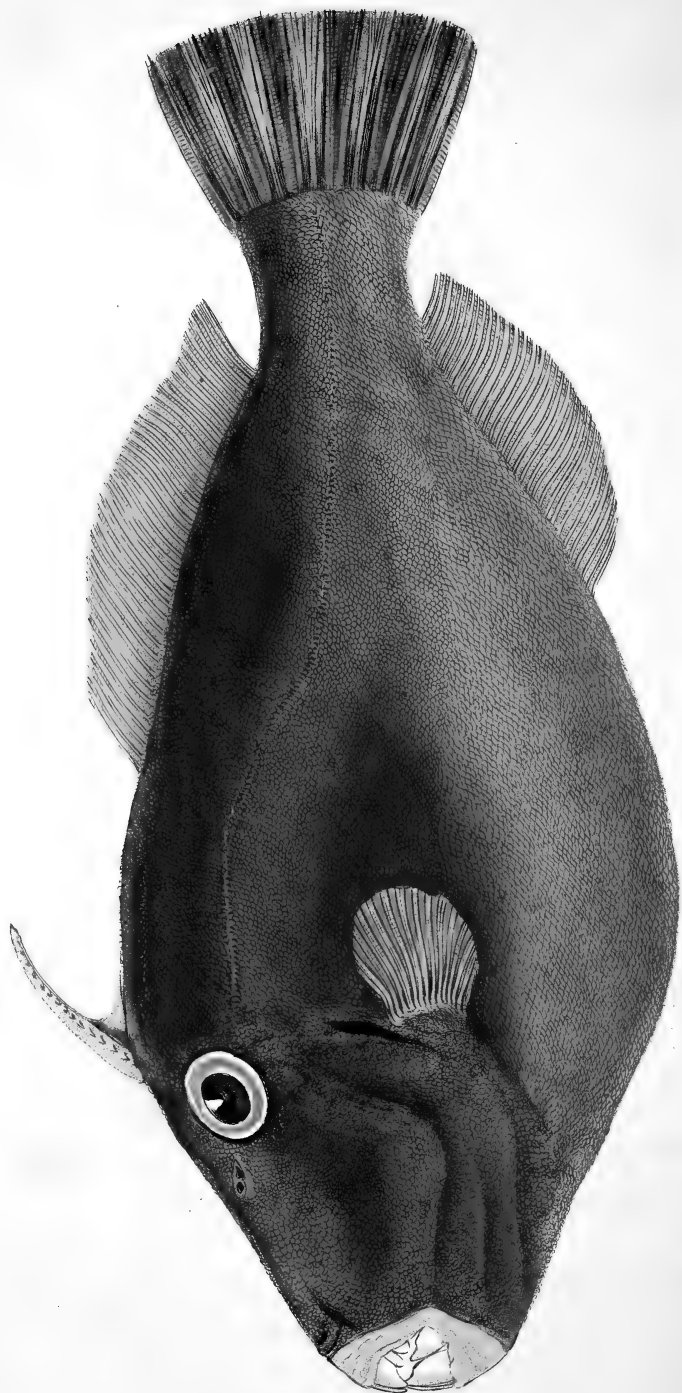
Jon. fig. pict. t. 1. tab. 71.

PLATE LXXV.

The experienced Entomologist, conversant with the labours of Fabricius, will be best enabled to appreciate the importance of the plate which we now submit to his attention ; he will be aware of the existence of this fine species of the *Papilio* tribe from the description which Fabricius has left us ; and he will also know that it is only from that description with the additional aid of Mr. Jones's drawings that this interesting and conspicuous species can be at this time possibly ascertained, for there are no descriptions of the species extant, except those repeated from the writings of Fabricius, nor any figure excepting that in the collectanea of Mr. Jones's drawings, to which Fabricius exclusively refers.

After having advanced the preceding observations, it will be assuredly sufficient for us, in order to ensure the attention of the Entomologist to observe, that although we possess a very choice example of this elegant insect in our own cabinet, the figures in the annexed plate are faithful copies of the individual drawings in the collection of Mr. Jones, to which Fabricius has referred ; and we conceive we render some advantage at least to science in thus enabling the naturalist to identify this fine and very interesting species in the classical works of that estimable Entomologist who has alone described it.

Papilio Thersander is described as a native of Sierra Leone.



London Rob^d as the Act directs by E. Donovan & McJ^r Simpson & Marshall May 1 1824.

ICHTHYOLOGY.

PLATE LXXVI.

BALISTES AUSTRALIS

SOUTHERN FILE FISH

PISCES BRANCHIOSTEGI.

GENERIC CHARACTER.

Head compressed close to the body, with sometimes a spine between the eyes : mouth narrow : teeth in each jaw eight, of which the two anterior ones are larger : aperture of the gills narrow above the pectoral fins : without cover : membrane two-rayed. Body compressed and rough with prickles.

SPECIFIC CHARACTER.

Brown : fin on the head one-rayed : tail rays carinated : body papillose, or finely granulated.

BALISTES AUSTRALIS, fuscus : pinna capitis uniradiata, radiis caudalibus carinatis : corpore papilloso.

PLATE LXXVI.

Length twelve inches, form somewhat ovate, moderately compressed, brown; the whole surface minutely papillose; smooth to the touch, but slightly rough in an inverse direction. The head is deeply sloping; the eye placed high, and immediately over it a small membraneous fin, connected anteriorly to a strong serrated spine. The second dorsal fin consists of thirty-six rays; the pectoral fin contains fifteen rays, anal thirty-one rays, and the tail fifteen rays. All the rays of the tail are strong and ramose, and the ten middlemost are alternately prominent, exhibiting five carinated rays on each side the tail; for each of those rays are carinated on one side and flat on the other, and are so disposed that the flat side of each lies half concealed between the prominent surface of the two lateral rays.

There is some reason to apprehend that this fish may be closely allied to the granulated *Balistes* of Surgeon White's voyage, or may possibly be the same; the fish described however by Mr. White was no more than four inches long, and of a paler colour; he speaks also of a second strong ray in the first dorsal fin, which does not appear in our specimen, and the difference in the number of the rays in the fins is material. He is silent as to their number, and the figure possibly may be faulty, artists generally having little conception of that minute degree of accuracy which is so essentially requisite in drawings of this nature: but if we can indeed rely upon the characters as expressed in the figure, we should at once pronounce it to be of another species. The connecting membrane in the first dorsal fin is wholly wanting, and only the rudiment of a greater spine apparent, and the second certainly ambiguous. The second dorsal fin has no more than twenty-two rays, the tail seven, anal fin seventeen rays, and pectoral six. In the fish before us they nearly twice exceed

ICHTHYLOGY.

that number, and this alone, if correct, would at once determine the two fishes to be specifically distinct. Mr. White's example, though smaller, would not have differed in this respect, and therefore we may conclude that his specimen must have been very imperfect or the representation most indifferent ; as we cannot be assured of its identity with any degree of certainty, and as no other species of its tribe is described by authors with which it may be confounded, we believe we may with some safety pronounce our present fish a non-descript species, notwithstanding its similarity to the *Balistes* before described.

The name of *Monoceros*, assigned by Linnæus to a species of *Balistes*, called for the same reason the Sea Unicorn, may excite an idea of its being the only one of the *Balistes* genus that has a single spine on the head ; this would not be precisely accurate, for although in general there are more than one or even two spines or rays in the first dorsal fin of the different species, we know more species that have only a single spine in the dorsal fin. The specific character of our present species is similar to that assigned to *B. Monoceros* by Linnæus, but it is at once distinguished from that fish by the fine granulated surface of the skin, that of *B. Monoceros* having the pustules considerably larger. Bloch has proposed also, as a decisive character of that species that the number of rays, in the anal fin amount to fifty-one ; in the species now before us there are no more than thirty-one rays in the anal fin.

Our *Balistes Australis* is a late acquisition obtained from Van Dieman's Land.



ENTOMOLOGY.

PLATE LXXVII.

PAPILIO BRUTUS

BRUTUS BUTTERFLY

LEPIDOPTERA.

GENERIC CHARACTER.

Antennæ thicker towards the tip and usually terminating in a club : wings erect when at rest. Fly by day.

** P. Equites Achivi.

SPECIFIC CHARACTER

Wings tailed and white, border black : posterior pair with a brown band beneath.

PAPILIO BRUTUS : alis caudatis albis : limbo nigro, posticis subtus fascia fusca. *Fabr. Ent. Syst. t. 3. p. 1. p. 22. n. 65.*

This is a species of the second family of Equites, and is as well in point of magnitude as in the singular and very decided disposition of its colours, an object too remarkable to be unworthy of particular

PLATE LXXVII.

attention. The superior surface is entirely of a pale or yellowish white of peculiar delicacy, the spots deep black and forming altogether a striking contrast with the ground colour on which they are disposed. The colour beneath is darker than on the upper surface, being tinted with brown and lineated with the same of a darker hue; the posterior margin is also brown as well as a broad band across the middle of the posterior wings.

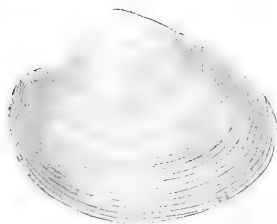
Fabricius describes this interesting insect as a native of Africa, from a specimen in the Banksian cabinet. Before that period the insect was however known, for it occurs in the works of Cramer; this author gave in the first instance a figure of *Papilio Brutus* from a mutilated example, in which the caudal appendages of the wings were wanting, and consequently it appears in his work without those appendages*, but in a subsequent plate he gave another figure of the insect in which that defect is corrected†. This species, which at the time Cramer published it appears to have been extremely rare and little known, has now become not very uncommon, since it occurs in most entomological cabinets of any considerable extent.

We should not in describing *Papilio Brutus* omit to notice that there is a variety of this insect found in the island of Madagascar which is very scarce; it is distinguished from the usual variety of equinoctial Africa by having the black spots, which compose the band across the posterior wings, confluent or united into nearly an uninterrupted band, while in the usual variety the connexion is broken or separated by the pale colour of the posterior limb of the disk, across which this band is disposed. In other respects no material difference is observable between the African species and that which inhabits the island of Madagascar.

* Plate 151.

† Plate 378.

1



2

CONCHOLOGY.

PLATE LXXVIII.

FIG. 1, 1.

VENUS STUTZERI

STUTZER'S PENCILLED JAPAN VENUS

BIVALVE.

GENERIC CHARACTER.

Hinge furnished with three teeth, two near each other, the third divergent from the beaks.

SPECIFIC CHARACTER.

Shell somewhat depressed and subrotund, thick, transversely striated, yellowish and marked with angular and somewhat reticulated fulvous lines.

VENUS STUTZERI: testa flavescente subdepressa subrotunda
crassa transversim striata: lineis angularibus
fulvis subreticulata.

PLATE LXXVIII.

This very delicate and prettily marked species of the Venus tribe is from Japan, and appears to be a shell entirely unknown among European collectors. The only example of its kind with which we are acquainted is in our own possession. This variety constitutes one of a very extensive series of the testaceous productions of Japan, such as are usually formed by the Japanese for the cabinets of the curious in that country, and which was brought to Europe by the late Dr. Stutzer, from whose collection we obtained it, together with many other curiosities of that interesting country. The importance of those acquisitions will be more fully appreciated when it is considered with what an invincible degree of jealousy the extensive territories of those people, the Japanese, is secluded from the visitation of Europeans, and consequently the very limited knowledge we must necessarily possess of the natural productions of that empire.

A figure of the interior as well as exterior surface of this curious shell is shewn in the upper part of the plate.



FIG. II.

VENUS HUMPHREYI

HUMPHREY'S VENUS

BIVALVE.

GENERIC CHARACTER.

Hinge furnished with three teeth, two near each other, the third divergent from the beaks.

PLATE LXXVIII.

SPECIFIC CHARACTER.

Shell roundish, heartshape, yellowish, transversely striated, and subreticulated, with angular rufous lines.

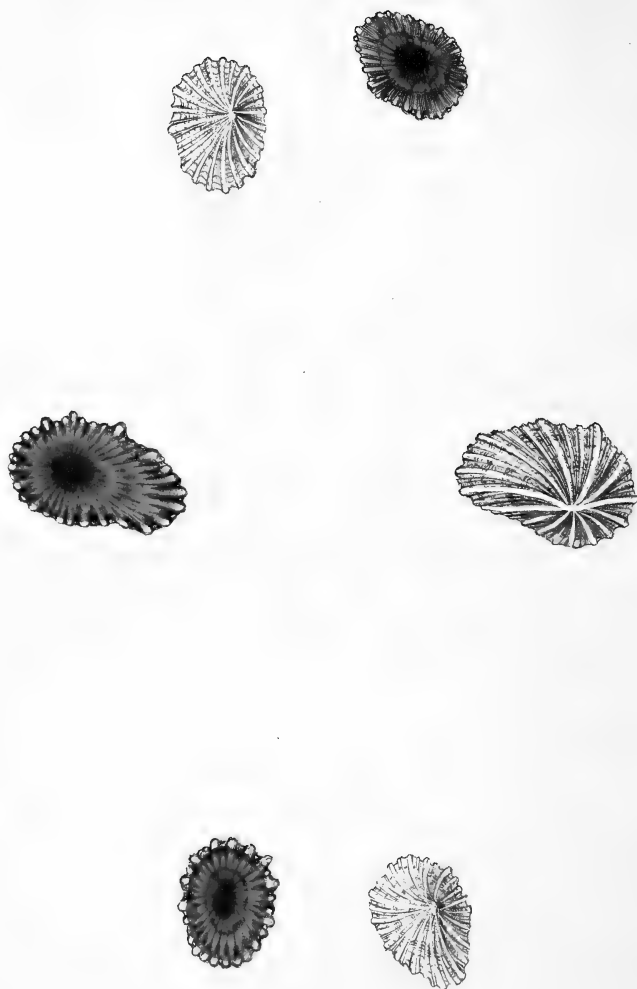
VENUS HUMPHREYI: testa flavescente rotundato-cordata transversim striata lineis angularibus rufis subreticulata.

Lately discovered by Mr. Humphrey on the sea coast of Van Dieman's-Land. This elegant species appears to be perfectly new, although from its very near approximation to *Venus Striatulus*, one of the most abundant of the European species of the *Venus* tribe, this may not at the first view appear obvious*. Upon an attentive comparison of those two shells it will be perceived that in *Venus Striatulus* the anterior part of the shell is produced or lengthened out, and somewhat pointed, while in the shell before us that part is rotundate, and the whole shell more inclining to a roundish oval form. It is this difference in the outline of the two shells that constitutes the most material distinction of the species, for the difference between them in colour is far less considerable in some examples of our European *Striatulus*, than the varieties of *Striatulus* which are occasionally met with are from each other. The fuscous lineations in our New Holland shell are minute, very numerous, and broken into dots or points by the transverse striæ of the shell; they are so generally in a less considerable degree in *V. Striatulus*, yet we have examples of

* Donovan's British Shells, plate 68.

CONCHOLOGY.

the latter species found on our own shores in which those lineations are smaller and more numerous than in the New Holland shell. In our *Venus Striatulus* the shells are usually marked with three or four broad fuscous bands diverging from the beaks to the margin; there are no such bands on the New Holland shell, but whether this be an accidental circumstance or a permanent distinction must remain uncertain till the examples of the latter species are produced in greater number than they are at present.



CONCHOLOGY.

PLATE LXXIX.

PATELLA JAPONICA

SMALL JAPAN LIMPET

UNIVALVE.

GENERIC CHARACTER.

Shell univalve, subconic, formed like a bason, and without spire.

SPECIFIC CHARACTER.

Shell grey, suboval: margin somewhat angulated, back obliquely conic, vertex slightly acute, reflected and black; within chesnut brown, margin dotted with white.

PATELLA JAPONICA: testa grisea subovali: margine subangulato, dorso oblique conico, vertice subacuto, subreflexo nigricante, intus castanea rufescente margine albo-punctato.

This elegant little Patella is from the same collection of Japanese shells as Venus Pulchella in the preceding plate, and like that species

PLATE LXXIX.

appears to be an undescribed kind : we have already stated that this collection was brought from Japan by Dr. Stutzer.

Patella Japonica has much the appearance of the common European Limpet, *Patella Vulgata* of Linnæus, but is far inferior in point of size ; it is also flatter and the margin less rotundate, being on the contrary rather lengthened and forming a somewhat incurvated outline by the sinuosity of one side. The margin is slightly angulated and the back rather oblique, the vertex being situated more towards the subemarginate or sinuous side than the other. The outside is moderately smooth and has about twenty rays or ribs. The inside is finely polished, of a chesnut brown colour, and has the margin dotted with white. In conclusion, it may be observed, that the sinuosity or incurvate outline on one side of the margin prevails so uniformly in all the examples of this shell, as to induce a persuasion of its being a characteristic particular of the species. Those shells which are adherent to other bodies are necessarily constrained to accommodate themselves to the peculiar locality to which they are destined to adhere, and hence such a compression on one side in an adherent shell might be attributed to accident, but this is not the case with a Limpet or *Patella*, the animal of which has the power of moving from place to place without the least restraint, and has therefore no occasion to accommodate the form of its shell to any particular situation.



ORNITHOLOGY.

PLATE LXXX.

PSITTACUS TABUENSIS

TABUAN PARROT

PICÆ.

GENERIC CHARACTER.

Bill falcated: upper mandible moveable and in general covered with a cere: nostrils rounded, placed in the base of the bill: tongue fleshy, obtuse, entire. Feet formed for climbing.

* Tail long, and cuneated.

SPECIFIC CHARACTER.

AND

SYNONYMS.

Green: head, neck, breast and belly purplish: neck terminated by a lunar blue mark; wings green; rump blue; tail deep brownish blue.

PSITTACUS TABUENSIS: viridis, capite collo corporeque subtus coccineis, lunula cervicis uropygioque cæruleis, alis viridibus, cauda fusca. *Lath. Ind. Orn.* 1. 8. 8. 19, *Gmel. Syst.* 1. p. 317.

PLATE LXXXI.

TABUAN PARROT: *Cook's Last Voyage*, 1. p. 335. *Lath. Syn.*
1. p. 214. 16. t. 7.

TABUAN PARROT: *Phillip's Voyage Botany Bay*. p. 153 *White's Journal*.

The trivial name of Tabuan Parrot, by which this noble species is distinguished, is derived from *Tongo Tabboo*, the name of one of the Friendly Isles in the South Seas, where it was discovered by Capt. Cook in his last voyage round the world. The prevailing hues of this bird were darker than those of the bird now before us, and which, though not specifically different, is distinguished by the more lively brilliancy of its plumage. This latter variety is a native of New Holland, was first introduced to notice by Governor Phillips, and subsequently by Mr. White in his voyage to New South Wales. The most striking difference between those two birds is perceptible in the more rich and vivid tints of the Green colour on the back and wings in the last discovered kind, but more particularly in the fine scarlet colour of the head, neck, breast and belly of the latter, those parts in the bird first met with not being of a deep purple but a very fine scarlet; it has also a blue lunular band at the back of the neck, and the back of the same colour.

The length of this fine species is about eighteen inches; the bird we have represented is the male: the female of the species, according to Mr. White, is nearly all green, the head, neck, and under parts olive brown; belly red; rump blue; tail above green, beneath dusky.



ENTOMOLOGY.

PLATE LXXXI.

PAPILIO IPHIGENIA IPHIGENIA BUTTERFLY

LEPIDOPTERA.

GENERIC CHARACTER.

Antennæ thicker towards the tip and usually terminating in a club: wings erect when at rest. Fly by day.

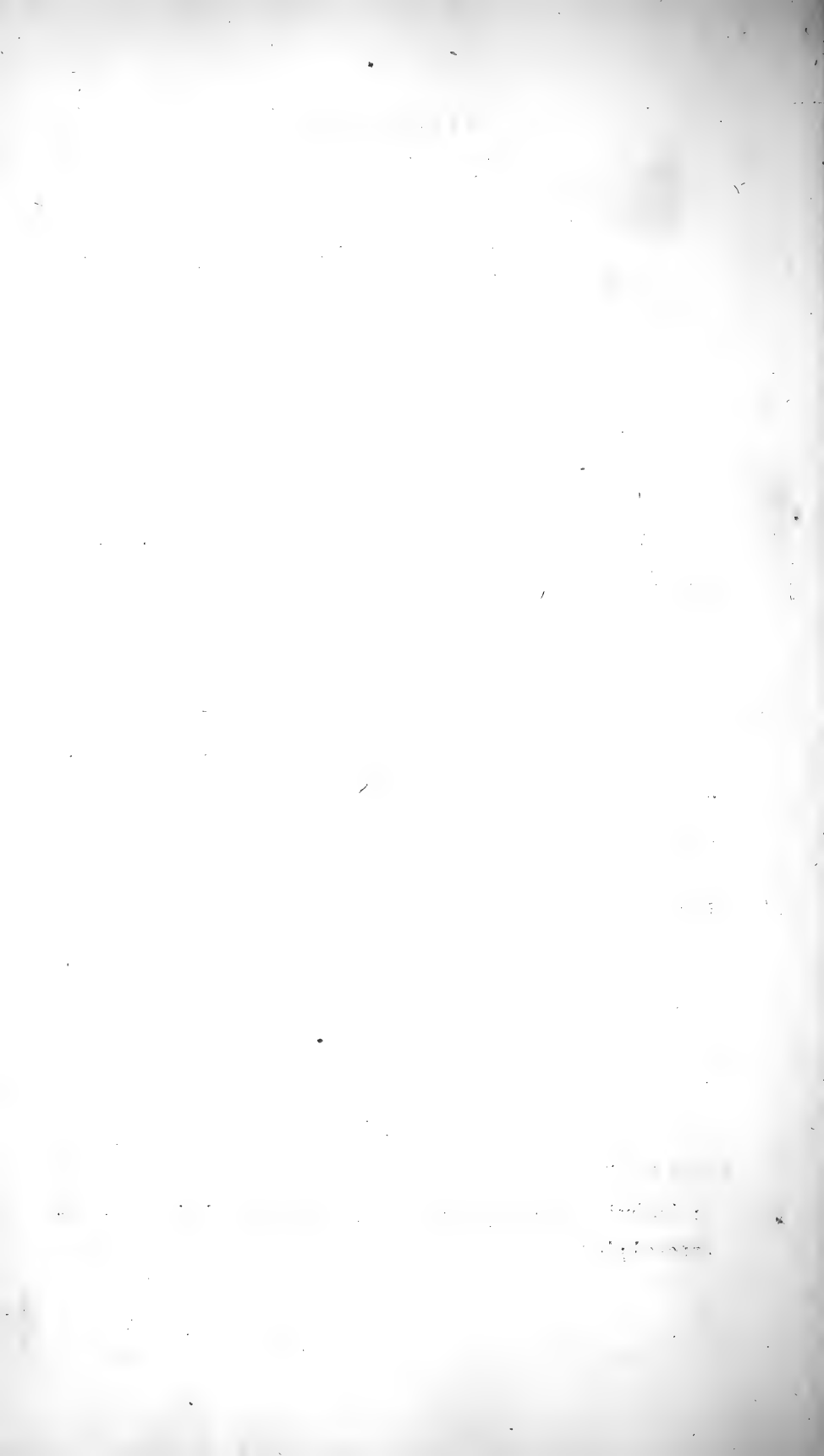
**** P. Danaï Candidi.

SPECIFIC CHARACTER.

Wings entire, white, with the tips black: posterior pair beneath yellowish: with a band of black in the middle, and an abbreviated fulvous band.

PAPILIO IPHIGENIA: alis integerrimis albis apice atris: posticis subtus flavescens: fascia media atra: striga abbreviata fulva. *Fabr. Ent. Syst. t. 3. p. 1. 199. 621.*

A delicate and very pleasing species of the *Papilio* tribe, found in Surinam; the upper and lower surface is depicted in the annexed plate.





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ICHTHYOLOGY.

PLATE LXXXII.

PRISTIS TENTACULATUS

TENTACULATED SAW-FISH

PISCES CHONDROPTERIGI.

GENERIC CHARACTER.

Snout long, flat, spinous down the edges : spiracles four or five and lateral : body oblong, roundish, covered with a rough coriaceous skin : mouth beneath : nostrils before the mouth, half covered with a membranaceous flap, behind the eyes two oval orifices ; ventral fins approximate, anal fin wanting.

SPECIFIC CHARACTER

AND

SYNONYMS.

Snout tentaculated, and serrated on each side with short teeth interposed between the longer ones.

PRISTIS TENTACULATUS : rostro utrinque tentaculato, spinoso, spinis longioribus brevioribusque intermediis.

PRISTIS CIRRATUS : rostro cirrato, spinis longioribus brevioribusque intermediis. *Lath. in Linn. Trans.* 2. p. 281.

PLATE LXXXII.

SQUALUS TENTACULATUS : rostro utrinque tentaculato, spinoso,
spinis longioribus brevioribusque intermediis,
Shaw Gen. Zool. v. 5. p. 2. 359.

This curious species of the finny tribe was made known in the first instance through the medium of a paper written by Dr. Latham and inserted in the second volume of the Linnæan Transactions as a new species of the *Pristis* tribe; and subsequently by Dr. Shaw in his General Zoology as one of the *Pristiform* species of the Sharks. It is entirely a native of the Southern hemisphere, and appears to be one of the rarer fishes that inhabit the Southern Seas. Our figure is copied from a very elegant and perfect specimen which was recently received from Van Dieman's Land, and which has been lately captured in the immediately adjacent seas.

The length of this species is twenty-six inches, its habit much resembling that of the Shark tribe, being slender and of a graceful form. The general colour above is a pale brown, beneath whitish; we have seen one from the same sea that differed only in being rather larger, and the snout of another which must have appertained to a fish yet more considerable in point of magnitude.

The teeth, which are numerous and of a somewhat triangular form with a short spine in the centre of each, are closely and singularly disposed in rows, the form and disposition of which is shewn at fig.* on one side of the plate. The alternation of the larger and smaller spines on each side the rostrum are an important and peculiar character of this species.



ENTOMOLOGY.

PLATE LXXXIII.

PAPILIO TYNDERÆUS

TYNDERÆUS BUTTERFLY

LEPIDOPTERA.

GENERIC CHARACTER.

Antennæ thicker towards the tips, and usually terminating in a club : wings erect when at rest. Fly by day.

Eq. Ach.

SPECIFIC CHARACTER

AND

SYNONYMS.

Wings dentated, black with green spots ; posterior pair beneath varied with fuscous green and red ; and dotted with black at the base.

PAPILIO TYNDERÆUS : alis dentatis nigris viridi maculatis : posticis subtus fusco viridi rubroque variis : basi nigro punctatis. *Fabr. Ent. Syst. t. 3, p. 1. p. 35. n. 104.*

Jon. fig. pict. T. 1. tab. 57.

PLATE LXXXII.

The reader may rest assured that a more interesting species of the insect tribe than that which is submitted in the annexed plate has not appeared in the present work. It is an insect that in its general appearance bears a strong resemblance to *Papilio Leonidas*, but on a very slight comparison of the two insects they will be perceived to differ materially, for they are in reality specifically different notwithstanding this similitude. *Papilio Leonidas** is to be met with in the work of Cramer, but the present is not; this latter is a Fabrician species, and is described in *Entomologica Systematica* of that author, from a specimen in the cabinet of the late Mr. Drury, and from the drawings in the collection of the late Mr. Jones. It is upon the authority of Mr. Jones, with the assistance of the original drawings and the Fabrician manuscripts by which they are accompanied, as well as the specimen in the cabinet of the late Mr. Drury, that we have identified the species beyond any possibility of doubt; and it may be also added, that the figures which are now presented to the reader are faithful copies of the original drawings which Fabricius describes.

We are induced to mention those particular circumstances the more precisely, because the present insect has lately been admitted by some continental naturalists of great respectability, as a new species, under the name of *Papilio Latreillii*. We entirely allow that the great talents of M. Latreille, as an Entomologist, had eminently entitled him to such a testimony of respect, but the compliment has evidently been very unintentionally bestowed at the expence of an

* Under the name of *P. Similis*, t. 1. p. 9. f. B. C. There is also some resemblance in this insect to *P. Agamemnon*.

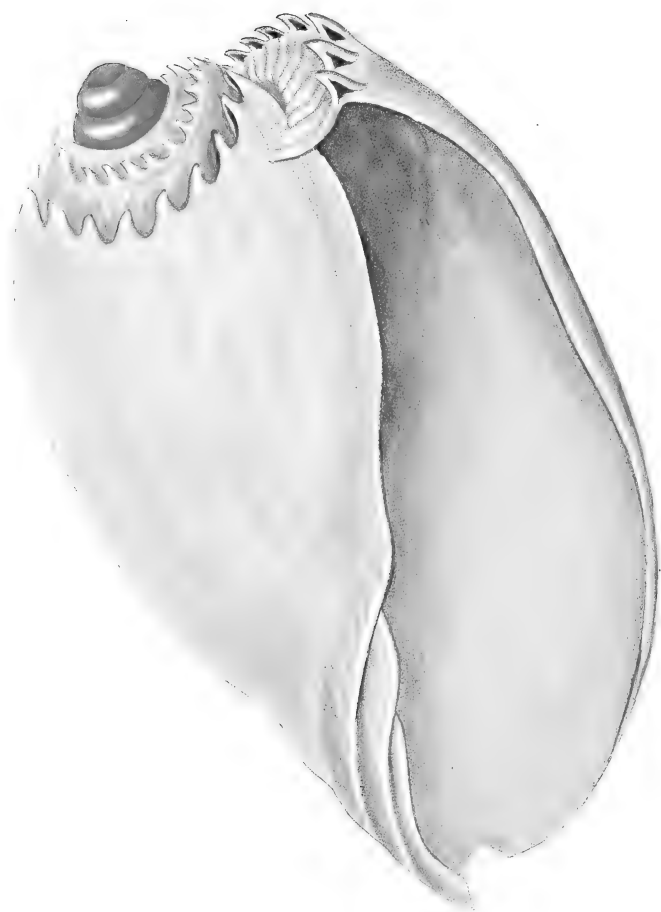
ENTOMOLOGY.

original species described by the celebrated Fabricius more than thirty years ago. It is not, we must confess, without some feelings of reluctance that we are constrained to rescind a name intended to honour that venerable and much respected naturalist, but that regard for scientific accuracy which we are bound to evince will best afford apology; and we shall not fail at an early period to assign some other conspicuous rarity instead of this to consecrate the name of M. P. Latreille.

Papilio Tynderæus is considered as a native of Africa, and our figures, which represent the upper as well as lower surface, appear on a sprig of

ERICA BOWERII, BOWER'S HEATH,

an inhabitant of Southern Africa, and one lately introduced into this country.



CONCHOLOGY.

PLATE LXXXIV.

VOLUTA JAPONICA

JAPANESE CROWN MELON SHELL

UNIVALVE.

GENERIC CHARACTER.

Shell spiral : aperture without a beak and somewhat effuse : pillar twisted or plaited, and generally without lips or perforation.

SPECIFIC CHARACTER.

Shell ventricose, emarginate, whitish yellow : spire crowned with arched spines, whorls somewhat distant : pillar lip four plaited.

VOLUTA JAPONICA: testa ventricose emarginata albido-flavescente
spira coronata spinis fornicatis, anfractibus sub-
distantibus : columella quadruplicata.

VOLUTA ÆTHIOPICA, Lamarck animaux sans vertebres. *T.* 7.
p. 331. 6. *Encl. Method. n.* 387. *f.* 1.

PLATE LXXXIII.

The Japanese Crown Melon *Voluta* is a shell of very unusual occurrence in this country, and is for this reason held by Conchological collectors in no small estimation. At the first view, this shell bears such a general resemblance to *Voluta Æthiopica*, the Æthiopian Crown Melon that it may be readily mistaken for a variety of that shell; it resembles also in the same distant manner *Voluta Nautica*, and may likewise have been sometimes confounded with that shell. The leading characters in which they differ having never been to our knowledge explained, it will be proper in this place to point out those characters which appear to us the most important to be considered in offering an opinion upon the species and its analogies.

From an extensive series of the whole of that tribe or family of the *Volutæ*, which are distinguished by the name of Melon *Volutes*, now before us, we believe it may be in our power to develop the difference between them with at least some degree of precision. We are quite aware that the variations in the growth of shells are oftentimes considerable, and that the same species does not preserve the same forms precisely in different countries, at the same time that they never so entirely lose their characteristic peculiarities as to be mistaken by the experienced naturalist. The very rare occurrence of the present species has precluded the possibility of collating the characters of more than three or four of those shells in the course of many years, but as these exhibit uniformly the same peculiarities, and that the Æthiopian Crown Melon, to which it is nearly allied, is sufficiently abundant to afford every opportunity for comparison in all its states of growth, we have ventured to consider them specifically distinct. The Japanese Crown Melon *Volute* is less ventricose than *Voluta Nautica* of Lamarck, and more ventricose than *Voluta Æthio-*

CONCHOLOGY.

pica, and those specimens which we have seen are smaller than either at their full growth ; the colour is pale yellowish, or rather whitish tinged with yellow brown ; *Voluta Nautica* is much darker, and *Voluta Æthiopica* is of a deep cinnamon colour, sometimes encircled with one or two paler bands, or sometimes with dark brown spots, disposed in the form of two bands around the shell. We have certainly seen upon the swollen part of one individual of the Japanese Crown Melon the commencement of two similar bands, but no trace of these were continued further, and consequently they were not visible on the upper surface. Our present shell, when full grown, is emarginate, while in *Voluta Æthiopica* the lip is effuse and marginate. The spines which crown the summit of the shell, and form the coronation of the spire are also less numerous in *Voluta Æthiopica*, for in two specimens of the Japanese and the Æthiopian Crown Melons of equal size we find forty-three spines in the former and only thirty-seven in the latter ; we admit that those may vary in number in different stages of growth, but we must upon the whole conclude that they seem to be most numerous in the Japanese shell : they are also erect, and not inclining inwards as in *Voluta Nautica* ; but are straight as in *Voluta Æthiopica*, and lastly, the Japanese shell possesses one character of obvious importance as a distinction of the species—the whorls of the spire are much more distant than in *V. Æthiopica*, the crown spreading more amply, and the space between the sutures of the whorls being wider and deeper than we have ever met with in *V. Æthiopica*.

These distinctions seem to us to point out the necessity of admitting the Japanese Crown Melon *Volute* as a species distinct from *Voluta Æthiopica*, notwithstanding their general similitude, and we are inclined to believe the characters we have pointed out will prove

PLATE LXXXIV.

sufficiently definitive to discriminate the two species from each other.

The shell, of which the figure is given in the annexed plate, is the specimen once preserved in the Leverian Museum, and which was sold by auction at the price of three guineas. This was nearly twenty years ago, and the species having continued to be scarce from that period, its value may be now considered greater.





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PLATE LXXXV.

FIG. * I, I.

BUPRESTIS MACLEAYI

MACLEAY'S BUPRESTIS

COLEOPTERA.

GENERIC CHARACTER.

Antennæ filiform, serrate, as long as the thorax: feelers four, filiform; the last joint obtuse, or truncated: head partly retracted within the thorax.

SPECIFIC CHARACTER.

Wing-cases one toothed at the tip, roughly striated and green, with a broad testaceous longitudinal stripe, not reaching their base: thorax punctured, and together with the body beneath coppery.

BUPRESTIS MACLEAYI: elytris unidentatis rugoso-striatis viridibus vitta testacea basin haud attingente thorace punctato abdomineque cupreis.

PLATE LXXXV.

The whole of the very numerous tribe of Buprestides, or at least with very few exceptions, are remarkable for the glowing metallic lustre of their tints, but there are few indeed that can vie with, much less excel, in point of brilliancy, the species now before us. The natural size of this curious insect is depicted at the bottom of the plate; that figure represents the inferior or abdominal surface, and is denoted by a single star. The figure in the middle of the plate, distinguished also by a single star, is that of the upper surface considerably enlarged, in order to express with more advantage the varied aspect of the insect when placed in a vivid light. Those figures will, we trust, convey a pretty correct idea of the general appearance of the insect, but we must confess it is beyond the effort of the pencil to pourtray that flush of rich and changeable metallic hues with which the insect is itself adorned.

This splendid creature appertains to the invaluable entomological cabinet of Alexander Macleay, Esq. F. R. S. &c. &c. to whose liberality we are indebted for the indulgence of affording it publicity; and as, besides its being one of the most beautiful of its genus, it has never been before described, we cannot dedicate the species to any one with more propriety than to its very liberal and much respected owner; we shall for those reasons beg leave to announce it to the learned world, as well as amateurs of science, as a distinctly new species, and one worthy of the designation of *BUPRESTIS MACLEAYI*.

This splendid acquisition is a native of Brasil; and is the only example of the species we are acquainted with.

ENTOMOLOGY.

FIG. * 2, 2.

BUPRESTIS CARDINALIS

CARDINAL BUPRESTIS

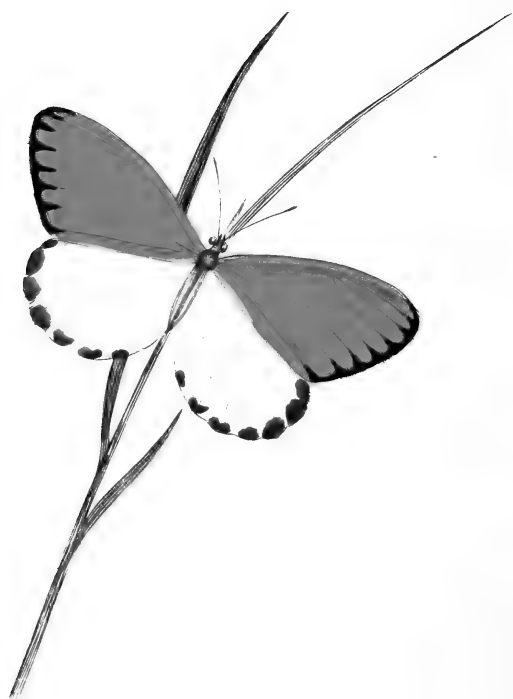
SPECIFIC CHARACTER.

Wing-cases serrated, red, with three elevated lines: thorax yellowish, having a large spot in the disk, with the head and abdomen black.

BUPRESTIS CARDINALIS: elytris serratis rubris: lineis tribus elevatis thorace flavescente: disco nigro capite abdomineque nigris.

A non-descript species of very singular character and formation, and from the same country as the preceding. The head is black above and beneath; the thorax entirely yellow above, except a bilobate spot in the middle; beneath black, except the anterior part, where the yellow passes from the upper surface of the thorax and forms a kind of collar: the wing-cases, with the scutel, are of a red colour, much inclining to scarlet; abdomen and legs black.

The upper, as well as the lower surface of this curious insect is represented in the annexed plate at fig. *. 2, 2.



ENTOMOLOGY.

PLATE LXXXVI.

PAPILIO RHODOPE

RHODOPE BUTTERFLY

LEPIDOPTERA.

GENERIC CHARACTER.

Antennæ thicker towards the tips and usually terminating in a club: wings erect when at rest. Fly by day.

Dan. Cand.

SPECIFIC CHARACTER

AND

SYNONYMS.

Wings entire, upper and lower surface nearly alike, and the outer margin of all the wings black: anterior pair yellow; posterior ones white.

PAPILIO RHODOPE: alis integerrimis sub-concoloribus extimo
nigris: anticis flavis albis. *Fabr. Ent. Syst. t. 3.*
p. 1. 197. n. 609.

PLATE LXXXVI.

PAPILIO RHODOPE: alis rotundatis integerrimis sub-concoloribus
externis nigris anticis flavis posticis albis. *Fab.*
Syst. Ent. 473. 130.—*Sp. Ins.* 2. p. 44. 184.

Simplicity is the peculiar character of this rare and interesting species; the deep fulvous colour of the anterior wings form a striking contrast to the pure or snowy whiteness of the posterior pair, while the extreme series of subconfluent spots of the deepest black form a distinct and appropriate margin round the whole. Its appearance, therefore, is not without attraction in point of elegance, and its claims to the attention of the Naturalist are further strengthened by its rarity, nor will its figure fail to prove acceptable, we may presume, when it is further added that it is one of those Fabrician species that has remained on record before the scientific world for nearly half a century past, without the advantage of any pictorial elucidation to assist the definition which that author has assigned to it.

The first description of the species extant is to be found in the Fabrician *Systema Entomologiæ*, published so early as the year 1775, and yet we may with confidence advance that the figure now submitted to the reader is the first delineation of the insect that has hitherto met the public eye. The original example of the species from which the Fabrician description was taken, and which has been subsequently repeated in the different Entomological writings of Fabricius, was one among the number of those many rare kinds which occurred to the observation of that indefatigable Entomologist in the cabinet of the late Sir Joseph Banks, Bart. and we may also

ENTOMOLOGY.

add that our present figure has been copied from the original specimen which Fabricius had described; an unreserved access to that invaluable cabinet having been allowed to us during the lifetime of its kind and most respected owner.

The description of *Papilio Rhodope*, the insect now before us, is to be found in *Systema Entomologiæ*, published in 1775; in *Species Insectorum* that appeared in 1781, and in *Entomologia Systematica*, by the same author, in the year 1783.

Papilio Rhodope is a native of Sierra Leone.



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PLATE LXXXVII.

PAPILIO SOPHORÆ

SOPHORA BUTTERFLY

GENERIC CHARACTER.

Antennæ thicker towards the tips, and usually terminating in a club : wings erect when at rest. Fly by day.

SPECIFIC CHARACTER

AND

SYNONYMS.

Wings entire, fuscous, with a ferruginous band: posterior pair beneath with two ocellar spots.

PAPILIO SOPHORÆ: alis integerrimis fuscis: fascia ferruginea posticis subtus brunneis: ocellis duobus. *Linn. Syst. Nat.* 2, 767, 121, *Mus. Lud. Utr.* 266.

A truly magnificent and very striking example of the Papilio tribe, peculiar to the fertile regions of South America. This fine

ENTOMOLOGY.

insect having been discovered before the time of Linnæus, we find it described in the writings of that author. The specimen which he describes, was one preserved in the Museum of the Queen of Sweden, and is minutely noticed in the Linnæan catalogue of that Museum.

This insect was formerly esteemed for its unusual rarity, but in consequence of our more extensive intercourse of late years with South America, it is become less uncommon. It is nevertheless still an insect of pretty considerable price, and from its interesting and very beautiful appearance, is likely to maintain its estimation: in the cabinet of the Entomologist it must ever remain one of the most attractive objects.

The magnitude of this insect being so considerable as to preclude the possibility of introducing more than one figure of it in the annexed plate, we have appropriated this to the representation of the lower surface, and shall introduce the delineation of the upper surface in the plate next succeeding, plate lxxxviii.



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PLATE LXXXVIII.

PAPILIO SOPHORÆ

SOPHORA BUTTERFLY

GENERIC CHARACTER.

Antennæ thicker towards the tips, and usually terminating in a club: wings erect when at rest. Fly by day.

SPECIFIC CHARACTER

AND

SYNONYMS.

Wings entire, fuscous, with a ferruginous band: posterior pair beneath with two ocellar spots.

PAPILIO SOPHORÆ: alis integerrimis fuscis: fascia ferruginea posticis subtus brunneis: ocellis duobus. *Linn. Syst. Nat.* 2, 767, 121, *Mus. Lud. Ulr.* 266.

The former plate (lxxxvii.) was devoted to the representation of the lower surface of this beautiful Papilio, and the present, in

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conformity with the intention therein expressed, is appropriated to that of the upper surface. This noble insect is produced from a gregarious, naked, lineated larva, that feeds on the plants of *Sophora tomentosa*, and it is from this circumstance that it has obtained the name of *Papilio Sophoræ*.

VERMIOLOGY.

PLATE LXXXIX.

ECHINUS LAMARCKII

LAMARCK'S ECHINUS

OR

CHINESE SEA URCHIN

MOLLUSCA.

GENERIC CHARACTER.

Body roundish, covered with a bony sutured crust, and usually furnished with moveable spines: mouth placed beneath, and generally five valved.

SPECIFIC CHARACTER.

Somewhat violaceous; conic, with ten spaces; the five larger divided in the middle with a suture, and beset with numerous transverse rows of tubercles: mouth somewhat ten angled.

ECHINUS LAMARCKII: sub-violaceus, conicus areis decem: arearum majorum medio sutura interstincto: verrucarum seriebus transversis plurimis; ore sub-decagono.

This very choice and rare example of the Echinus tribe is we believe, a new species, and under this persuasion we have much pleasure in distinguishing it by the name of Echinus Lamarckii, in

VERMIOLOGY.

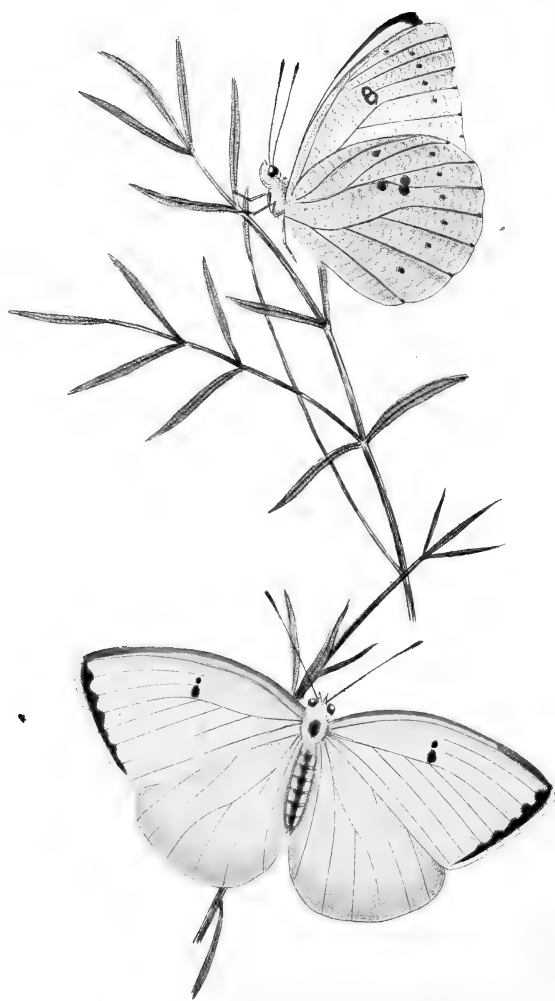
compliment to Chevalier de Lamarck, the author of the work entitled *Animaux sans vertèbres*, who has paid particular attention to this class of animals.

In its general figure this species bears more resemblance to *Echinus albo-galerus* than to any other of the described kinds; but *Echinus albo-galerus* is comparatively inconsiderable in point of magnitude, and is found only in a fossil state; and it may be also added, that the disposition of the verrucosities by which our present species is distinguished is totally dissimilar. In this extensive tribe there are some few other approximations, but when duly considered, they will be found very different from this species.

The only specimen we have seen of this curious production, was that preserved in the late Leverian Museum, and which is of course the original example, from which our figure in the annexed plate is depicted.—It realized at the sale of that Museum a considerable price, and has, we understand, been since broken, a circumstance by no means unanticipated, the shell being of the most fragile kind. The destruction of the specimen will probably render the delineation the more acceptable, this being, as we are informed, the only drawing that had been taken of it, excepting one by Chevalier de Bardé, a French gentleman of rank among the *ci-devant* noblesse, who followed the arts as a profession during his exile in this country, and which upon the restoration of tranquillity in his native country, was carried by him with his other drawings into France, and still remains unpublished.

This interesting novelty which may probably be unique, was originally in the possession of Sir Ashton Lever, who received it from China.





ENTOMOLOGY.

PLATE XC.

PAPILIO FLORELLA

FLORELLA BUTTERFLY

LEPIDOPTERA.

GENERIC CHARACTER.

Antennæ thicker towards the tips, and usually terminating in a club: wings erect when at rest. Fly by day.

DAN. CAND.

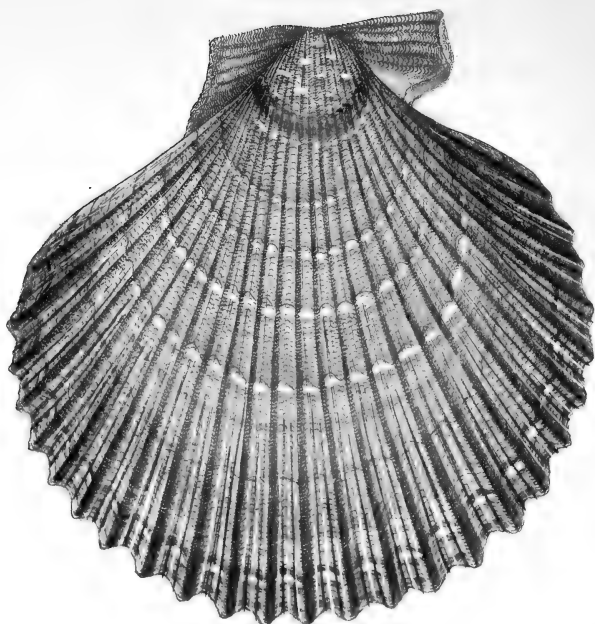
SPECIFIC CHARACTER.

Wings somewhat angulate, white, with a fuscous dot in the middle of the anterior pair: posterior ones beneath with three silvery dots.

PAPILIO FLORELLA : alis subangulatis albis : anticis puncto fusco, posticis subtus punctis tribus argenteis.
Fabr. Ent. Syst. T. 3. p. 1. p. 213. 666.

PLATE XC.

This delicate Butterfly is one of the African species, described by Fabricius from the Banksian cabinet, and has not been figured in the work of any author. It is represented in the annexed plate in a flying as well as resting position, by which means both the upper and the lower surfaces are displayed to view. The figures are copied from the specimen in the Banksian cabinet, which Fabricius describes.



CONCHOLOGY.

PLATE XCI.

OSTREA MATONII

MATON'S SCALLOP

BIVALVE.

GENERIC CHARACTER.

Shell generally with unequal valves and slightly eared : hinge without teeth, but having an ovate hollow and mostly lateral transverse grooves.

* PECTEN. Valves furnished with ears and radiated. *Scallop.*

SPECIFIC CHARACTER.

Shell somewhat equivalve, orbicular, with thirty longitudinal striated rays, the striæ very finely imbricated.

OSTREA MATONII : testa subequivalvi, orbiculari, radiis 30 longitudinaliter striatis, striis subtilissime imbricatis.

PLATE XCI.

A newly-discovered species of the *Pecten* tribe that inhabits the seas of Van Dieman's Land, and which has only been very lately introduced to the knowledge of European naturalists. The specimen in our cabinets, the subject represented in the annexed plate, was transmitted to England with other shells, the production of Van Dieman's Land by Mr. Humphries, a resident in that part of the southern hemisphere, and one to whose attention as a collector we are indebted for many other novelties of the same nature that are equally new and interesting to the science.

Among the number of the testaceous productions that inhabit the seas surrounding the British Isles, we possess two species of the *Pecten* tribe that may appear to the inexperienced amateur as bearing a very close resemblance to the present shell, and which perhaps without due examination might be mistaken for and confounded with it. The first is the *Ostrea subrufa*, and the other *Ostrea Monoetis* of our British Conchology; we do not mean that either of those shells in the younger state could be so far misconceived, but there are transitions in the growth of the older shells, when the more minute distinctions of their rays and other peculiarities are worn away or in part obliterated, that would render it rather more difficult to distinguish them than in their young and uninjured state, and this the more especially since our present shell presents some characteristic features of both, and indeed forms an intermediate species between the two. On duly comparing those three species, and we have examples of each at this time before us, we can scarcely hesitate in denominating our present shell an intermediate link in the chain of species; it is smaller than the larger growth of *Ostrea subrufa*, and larger than *Ostrea monoetis*. In the form or contour the shell is less orbi-

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cular than *O. subrufa* and more so than *O. monoetis* ; unlike either it is produced a little obliquely to one side, while having two ears of nearly equal magnitude, it is at once distinguished from *Monoetis* which has invariably no more than one ear, or at least the other is so small as to justify the appellation of *Monoetis*. This presence of two distinct ears therefore again removes it nearer to *O. subrufa* ; but in admitting the *Ostrea subrufa* to be the nearest of those two analogies to the present shell, it will be found to possess another character which separates it still more remotely than *monoetis*, namely, the number of longitudinal rays, for in the present shell there are no less than thirty of those rays, while in *O. subrufa* there are no more than twenty. In this latter particular our shell accords with *O. Monoetis*, for the usual number of rays in that shell is thirty, and by this means that species is once again brought into the alliance. But having so far pointed out the distinctions that apply only alternately to one of those species or to the other, we arrive at one which distinctly removes our present shell from either, namely, the characteristic features of those longitudinal ribs in the three species respectively : in *Ostrea subrufa* they are only slightly elevated, broad and glabrous ; in *monoetis* raised narrow and somewhat angular, the centre of the rib being flat, and the ribs as well as the grooves between them being transversely intersected with large raised arched spines, which are placed at a moderate distance from each other, and are sufficiently conspicuous in the perfect or unworn shell ; in our present shell, the spines should rather be denominated prickles, they are extremely small, inconspicuous, and closely set, and are consequently extremely numerous in comparison with those of *Ostrea monoetis*. We should further add, that in our present shell the longitudinal rays are not flat, but form an acute ridge down

PLATE XCI.

the centre, and are sulcated longitudinally. There are besides this central ridge, two equally well defined though narrower striæ, disposed on each side of the central line or ridge, so that each of the longitudinal rays constitute a quintuple series of raised lines, the middlemost of which forms the most prominent elevation, the others lying on the lateral slopes. There can be no hesitation in admitting those shells to be perfectly different, but we have deemed it requisite to point out those distinctions since there is, as it will be perceived, a general assimilation at least, and that our present shell appears to form an intermediate species between the two.

It will have been observed, that we have laid no particular stress upon the difference that prevails in the colours of those different shells, because among many varieties of those shells it would not be difficult to find examples that would accord, in this respect at least, in a general manner; indeed, so dissimilar are many of the shells of *monoetis* in this particular, that the species has obtained the name of *varia*, and although from the term *subrufa*, applied to the other, it may be understood as being somewhat rufous, we often find it elegantly varied with other colours. Our present shell, it may be added, is more transparent, thinner, and more brittle than either of the former, and the colour dark rufous, varied with purple; both valves are convex.

Regarding this as a new species and one to which no name has been hitherto appropriated, we conceive it cannot be assigned with more propriety than to compliment the name and labours of Dr. W. G. Maton, the author jointly with the Rev. Thomas Rackett of a valuable and useful paper on the subject of British Conchology,

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inserted in one of the volumes of the Transactions of the Linnæan Society. The near assimilation of the present shell to those of our own seas, may render the compliment more peculiarly appropriate, that much respected naturalist having devoted particular attention to the conchology of this country, as the paper alluded to sufficiently evinces. We have indeed to offer some apology on this occasion for passing over the name of the reverend gentleman, the friend and coadjutor of Dr. Maton in the labours of that scientific memoir, but for this we shall atone ere long, having another rarity from the same shores, which also bears a near resemblance to one of our British shells, and to which the name of that worthy friend shall be assigned.



ORNITHOLOGY.

PLATE XCII.

PSITTACUS PENNANTII

PENNANTIAN PARROT

PICÆ.

GENERIC CHARACTER.

Bill hooked, upper mandible moveable and usually covered with a cere ; nostrils placed in the base of the bill : tongue fleshy, obtuse, entire. Feet formed for climbing.

SPECIFIC CHARACTER

AND

SYNONYMS.

Scarlet ; anterior part of the back black waved with scarlet ; sides and throat blue : quill feathers each with a white spot.

PLATE XCII.

PSITTACUS PENNANTII: coccineus, dorso antico nigro coccineo undulato, lateribus corporis gulaque cæruleis, remigibus intus macula alba. *Lath. Ind. Orn.*
T. 1. p. 90. n. 26.

PENNANTIAN PARROT, *Lath. Syn. Sup. p. 61.*

This is assuredly one of the most elegant species of the Parrot tribe that has hitherto been discovered. It is a native of New South Wales, where it was discovered by our first circumnavigators who accompanied Capt. Cook in his memorable voyage round the world, and was, shortly after the return of the expedition, made known to the public as one among the number of the more choice and interesting acquisitions with which the researches of our naturalists had been rewarded. A specimen of this elegant bird was placed also in the museum of Sir Ashton Lever, where from the singular richness and beauty of its colours it could not fail to attract very general admiration. Subsequently the species was described by Dr. Latham in the supplement to his Synopsis of Ornithology, and after that time in Dr. Shaw's *Museum Leverianum*, and in White's *Journal of a Voyage to New Holland*. For the space of many years the bird, remained however, a species of more than usual rarity in our collections, and it is still considered far from common, notwithstanding our uninterrupted possession from that period to the present of that portion of New South Wales which it is known to inhabit. The feathers of this elegant bird, in common with those of some others of the more gay and splendid kinds, are employed in the manufacture of the war

ORNITHOLOGY.

cloaks, dresses of ceremony, and other apparel of the natives, and this may perhaps in some degree explain the comparative scarcity of the species in European collections, while, in reality, the bird may not be scarce in its native country.

There are several varieties of this species which differ in some slight particulars, incidental probably to the transitions of the plumage in different stages of its growth. That which we have represented is a fine and full-coloured example of the male bird in the highest perfection of its plumage ; the female differs in having the back and belly green, the crown of the head a deep red of a sanguineous hue, and the thighs and vent red.

The length of this bird is sixteen inches.





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PLATE XCIII.

PAPILIO GEMELLUS

GEMELLUS BUTTERFLY

LEPIDOPTERA.

GENERIC CHARACTER.

Antennæ thicker towards the tip, and usually terminating in a kind of club: wings erect when at rest. Fly by day.

* *HESPERIA RURALES. Fabr.*

SPECIFIC CHARACTER

AND

SYNONYMS.

Wings entire, yellowish, with a brown border: beneath white with a red streak in the middle, and a marginal streak of red lunules on both wings.

PLATE XCIII.

HESPERIA GEMELLUS: alis integerrimis flavescentibus: limbo fusco subtus albis: striga media lunulisque marginalibus sanguineis. *Fabr. Ent. Syst. T. 3. p. 1. p. 319. 208. Jon. fig. pict. 6. tab. 36. f. 2.*

The scientific Entomologists of Europe will be aware that this is one among the number of those Fabrician species of the Hesperia tribe, which Fabricius has described from the drawings of Mr. Jones, and of which no figure has hitherto appeared: its introduction therefore to public notice cannot fail to be esteemed of some moment to the curious generally, and to the Entomologist in particular. The original drawing was taken by Mr. Jones from a specimen in the cabinet of Mr. Drury, that had been received from Cayenne, and was subsequently described in the entomological writings of Fabricius, to which our synonyms refer. It is an insect of simple, delicate, and pleasing aspect, especially beneath where the red streaks and lunules of the same colour appear to peculiar advantage on the pure white, which constitutes the ground colour of the wings. Its size and appearance will be found very correctly expressed in the figures of the annexed plate.



CONCHOLOGY.

PLATE XCIV.

CONUS BETULINUS

LONG SPOTTED CONE

UNIVALVE.

GENERIC CHARACTER

Shell convolute, turbinate ; aperture effuse longitudinal, linear, without teeth, entire at the base ; pillar smooth.

* PYRIFORM with a rounded base : the cylinder half as long again as the spire, or more.

SPECIFIC CHARACTER.

AND

SYNONYMS.

Shell somewhat emarginate at the base and wrinkled : spire flat-tish and mucronate : colour whitish, with brown spots disposed in transverse series.

PLATE XCIV.

CONUS BETULINUS: testa basi subemarginata rugosa: spira planiuscula mucronata; albida maculis fuscis transversim seriatis.

CONUS BETULINUS: testa basi subemarginata rugosa: spira planiuscula mucronata. *Lin. Lud. Ulr.* 557. n. 165.

Our present plate exhibits, in two different views, a richly coloured example of that very interesting species of Cone, the *Conus Betulinus* of Linnæus. This is a shell which may be deservedly considered as one of the most beautiful of the testaceous productions of the Indian seas. It is a shell of a noble size, with a smooth glossy surface, and is in particular remarkable for the symmetry and elegance with which the spots are regularly disposed in bands surrounding the whole shell. There are several pretty distinct varieties of this species, which differ chiefly in the number of the spots and in their magnitude. In some kinds the spots are disposed in pairs, in others they are insulated or single, and thus form either single or double girdles: and they differ also in the intensity of the colour, as well as the number of the bands into which they are disposed. Our variety, as it appears in the annexed plate, is elegantly diversified with several intermediate girdles of an orange or citron hue, a character observable in this variety principally, and which forms an admirable relief when deeply coloured, to the macular bands of fuscous with which the shell is alternately encircled.





ENTOMOLOGY.

PLATE XCV.

CURCULIO CRÆSUS

CRÆSUS CURCULIO

COLEOPTERA.

GENERIC CHARACTER.

Antennæ clavate, and seated on the snout, which is horny and prominent : feelers four, filiform.

SPECIFIC CHARACTER

Snout long : body black, variegated with golden green : wing-cases with alternate elevated black striæ and green golden punctured furrows, and irregularly marked with excavated gold spots : base gibbous, tip pointed.

CURCULIO CRÆSUS longirostris, corpore nigro viridi aureis variegato, elytris striis elevatis atris sulcisque punctatis viridi aureis alternis, aureo maculatis excavatis vagis, basi gibbis, apice acuminatis.

ENTOMOLOGY.

It may appear extraordinary, that an insect of this size and brilliancy should have hitherto escaped the attention of every entomological writer, since examples of the species are to be met with in most cabinets of eminence, as well in this country as in other parts of Europe, and yet it certainly is not to be found we believe, at this time, in the work of any preceding author.

The period is within our knowledge, when this insect was considered extremely rare; it had no place in the once celebrated cabinet of Mr. Drury, the most estimable, with the exception of the Banksian cabinet, at that time in this country. We then possessed one specimen in our own cabinet, the subject delineated in our present plate. There were also two specimens in the cabinet of Mr. Francillon, and two others were arranged with the Curculiones in the collection of Major General Davies, of Blackheath. Those were all, we believe, that were to be found, at that time in the cabinets of this country, nor was the species apparently then known upon the continent, if we may form any just conclusion on that subject from the silence of Fabricius; for although he describes several very brilliant species of this splendid family, this particular species is nowhere mentioned by him. Such are the local circumstances of the history of our present insect till within about the last twenty years, when a large consignment of them from Brasil, consisting of perhaps scarcely less than two hundred specimens was produced among the duplicate insects of Major General Davies. Those reserves had been treasured together, as we understood, by that zealous collector for some years, but were necessarily produced after his death with the rest of his effects at the public sale. It will naturally be concluded, that the production of such a host of those beautiful insects, enabled the

PLATE XCV.

collectors of that time to enrich their cabinets with specimens, and that they were sold at a moderate price, which was really the case. Before that period, the insect was esteemed more rare, and bore a higher price than even that celebrated insect emphatically denominated the “Diamond Beetle,” to which in its general habit it is nearly allied, and to which it scarcely yields in point of beauty. Since that time no further supply having been introduced, the species has become gradually uncommon, and it is now rarely seen except in the older collections of exotic entomology.

The fertile regions of South America are well known to be productive of the most brilliant objects of the insect tribe with which we are acquainted, and those of the particular family to which our insect appertains, the Curculiones of Linnæus and Fabricius are distinctly known to rank among the number of the most splendid species. There is indeed a natural family of those insects, to which our present insect belongs, at the head of which the species *C. imperialis* may be placed, that seems to vie with each other in the gorgeous splendour of their decorations, and it must be confessed that they are not eclipsed in this respect by any others of the insect race; such are the Curculiones sumptuosus, splendidus, and several of their analogies, all which are natives of South America, and these collectively serve to shew that those regions yield to none in the splendour of those natural productions with which the entomologist is so delighted.

The present insect, which in allusion to the metallic golden lustre it displays, we have denominated *Croesus*, follows naturally next in succession after the varieties of *Curculio imperialis*, the size is nearly the same, though in some instances it may be in a trifling

PLATE XCV.

degree smaller ; its near similitude has been already noticed. The general colour of the insect, like that of *Imperialis* when its coating of brilliant scales is rubbed away, is a deep glossy black ; the snout is somewhat lengthened, or rather longer than the thorax ; the thorax is black, golden at the sides and tuberculated or rough with raised dots, and the centre marked with a golden sulcation or sunken line. The wing-cases are black, and so striated with impressed dots as to form alternate elevated lines and punctured furrows, which are deeply and somewhat irregularly marked with excavated spots of a sub-ovate form, and within which one or more of the impressed points appear most commonly to lie longitudinally down the centre. Those furrows are lined with small brilliant scales of a golden green colour, the sub-ovate excavations with scales resplendent with the auriferous lustre of the purest gold, and so nearly resembling the metallic hue of gold itself as to assume rather the appearance of art than nature ; those spots are so conspicuous and distinct as to have obtained the insect the name of the “ Gold-Splash Diamond Beetle,” and which as a trivial appellation is sufficiently characteristic of the difference that prevails between this species and its affinity *C. imperialis*. This golden lustre pervades as well the lower surface, excepting only that the brilliancy is more general, the black colour of the beetle being concealed by the closer and more uniform compactness with which the brilliant scales, to which it is indebted for this colouring is disposed. The legs are black and very slightly ciliated, a character of some importance to be considered in defining the species, since there are other insects of the same tribe which are distinguished by the hairyness of those limbs.

In order to convey a more correct idea of the appearance of this insect, we have found it necessary to give the figures rather larger than life ; the natural size is represented by the shaded impression shown on the sandy ground at the bottom of the plate.



ORNITHOLOGY.

PLATE XCVI.

THE EGG

OF

PSITTACUS ERITHACUS

THE ASH-COLOURED PARROT

Some among the number of our subscribers who have kindly favoured us with their ideas on various points connected with our present undertaking, have expressed a wish to see the eggs of foreign birds occasionally introduced to their consideration, this interesting department of enquiry, as it is observed with truth, being very little regarded by the generality of naturalists, and being even of unusual occurrence in the works professedly written on the subject of Ornithology. When the difficulty of obtaining authentic information upon this subject be considered fully, this can scarcely excite surprise, they are not to be obtained without the greatest difficulty, nor is the information to be met with respecting them, when procured, sufficiently precise on every occasion to deserve the confidence of the ornithologist. Our collection of the eggs of

PLATE XCVI.

the birds of this country is highly interesting, but that it is not very amply stored with the eggs of foreign birds, must be conceded. We have nevertheless a few, and some among them of no mean importance, and these, should it appear to meet the wishes of our readers, will be introduced to notice as opportunities occur. The subject now submitted is one of those ; it is the egg of a parrot, and which, upon the most authentic information was laid by the bird while in a state of confinement in London, about forty years ago ; a circumstance that may at least assure us of the authenticity of the article, and so far render it an object of decided curiosity. This egg, together with the bird, was once in the possession of the late Sir Ashton Lever, and formed a part of his extensive museum till the period of its dissolution, in 1806, when it came into our hands. The parent bird was the *Psittacus erithacus* of Linnæus, the Common Ash-coloured Parrot, that inhabits Guinea, Angola, and other parts of Africa.

In conclusion it should be observed, that according to Dr. Latham's information it is not usual for the female of this species to lay eggs in England, but these of course prove unproductive, except in those few instances where the male and female have been together, and then very rarely in our climate. At Marmande in France a male and female that had been kept for five or six years together produced young ; they made their nest in spring and laid four eggs, of which never more than three were good. Labat also speaks of a pair that hatched young ones at Paris.





ENTOMOLOGY.

PLATE XCVII.

PAPILIO TIMON

TIMON BUTTERFLY

LEPIDOPTERA.

GENERIC CHARACTER.

Antennæ thicker towards the tip and generally terminating in a knob : wings erect when at rest. Fly by day.

SPECIFIC CHARACTER

Wings three tailed, at the base greenish, beneath white with an abbreviated blood red band on the posterior ones.

HESPERIA TIMON : alis tricaudatis basi virescentibus, subtus albis ;
posticis fascia abbreviata sanguinea. *Fabr. Ent.*
Syst. T. 1. p. 2. 260. n. 9.

Papilio Timon is another of those choice examples of the Papilio tribe, for the description of which we are indebted solely to Fabricius, and for the illustration of the species to the inestimable drawings of

PLATE XCVII.

Mr. Jones, for the only description of it to be found extant is in the writings of Fabricius and its only figure among those drawings. The species is a native of South America, and was originally preserved in the cabinet of Mr. Drury, subsequently this rarity came into our own possession. Fabricius refers for the specimen he describes to the cabinet of Dr. Hunter, in which there may perhaps be other examples of the same insect, but we are well assured from the Fabrician MS. that the description of the species which he has left us was taken from the drawing in the collection of Mr. Jones, and that this drawing was copied from the specimen in the cabinet of Mr. Drury, to which we have adverted.

The beauty of this interesting Butterfly will sufficiently recommend it to the notice of the entomologist, nor can its figure prove in the least degree unacceptable, since it is so obviously from this authority alone that the species can be distinctly ascertained. The learned naturalists of Europe have been long since assured of the existence of such a species through the writings of Fabricius, a circumstance which it must be presumed will render a faithful pictorial illustration of the species of greater moment than if the species had remained unnoticed or entirely unknown till the present period.



ORNITHOLOGY.

PLATE XCVIII.

GRACULA RELIGIOSA

MINOR GRAKLE

PICÆ.

GENERIC CHARACTER.

Bill convex, acutely edged and rather naked at the base: tongue entire, rather sharp and fleshy: feet formed for walking.

SPECIFIC CHARACTER

AND

SYNONYMS.

Violet-black; spot on the wings white, hind head with a yellow naked band.

GRACULA RELIGIOSA: nigro-violacea, macula alarum alba, fascia occipitis nuda flava. *Linn. Syst.* 1. p. 164. 1.
Gmel. Syst. 1. p. 395. *Lath. Ind. Orn. t.* 1. 189. 1.

The facility with which the various birds of the Parrot tribe articulate the sounds of the human voice is known to every one, but it is certainly less generally understood that there are many other beings of the feathered race which are capable, in a greater or less degree of expressing the like sounds, and some among the number with admirable success. The bird before us is one especially endowed with those extraordinary powers of utterance in an eminent

PLATE XCVIII.

degree ; it is indeed said to be a more skilful imitator of the sounds of the human voice than any of the Parrot tribe, and that in whistling and singing it is equally excellent ; possessing, as it does, this faculty of speaking, and in some degree of associating ideas with the expression of the voice, it is regarded by the Indians, in those countries which it inhabits, with a kind of superstitious veneration, and being of a tractable and familiar disposition, is easily brought to a state of domestication as an inmate and companion in their dwellings. Its food is of the vegetable kind, and it is observed to be in particular fond of grapes and cherries. This species inhabits Java, where it is called Maynoa ; it is also a native of China, figures of it appearing among the birds of that country published by the Chinese themselves, and also in the Japanese books on Natural History as a native of Japan.

In point of size this bird may be compared with the European Blackbird ; the length is about ten inches, the body rather robust, the bill and legs rather long, and the tail short. The general colour of the plumage is black, glossed with blue, and changeable in various directions of the light to green and purple. The colour of the bill is orange, and of the legs brown ; from the base of the bill, or sometimes rather from beneath the eye, extends a broad line or band, bare of feathers, of a yellowish colour, and which passing behind the region of the eye, forms a continued band round the hind part of the head ; the colour of this naked band, though yellowish in general, becomes of a flesh colour, or heightens to a deep red, when the animal is irritated. With the exception of this band, the only diversity of the plumage consists in a broad white band which passes across the middle of the wing.



CONCHOLOGY.

PLATE XCIX.

CONUS MARMOREUS

MARBLED CONE

UNIVALVE.

GENERIC CHARACTER.

Shell convolute, turbinate : aperture effuse, longitudinal, linear, without teeth, entire at the base : pillar smooth.

* Spire nearly truncated.

SPECIFIC CHARACTER

AND

SYNONYMS.

Shell conic, fuscous with ovate white spots, whorl of the spire grooved.

CONUS MARMOREUS : testa conica fusca : maculis ovatis albis ; spiræ anfractibus canaliculatis. *Linn. Lud. Ulr.* 550. n. 151. *Gmel. Linn. Syst. Nat.* 3374. 1.

PLATE XCIX.

Conus Marmoreus, independently of the symmetrical elegance of its structure, which it bears in common with the generality of the other species of its tribe, is remarkable for the singular and very decided manner in which its surface is characterized, the colour being black, profusely checquered with spots of white. Those spots are not uniformly of the same form or magnitude, although they are nearly uniform in those particulars in the same individual specimens. Thus in some examples the spots are all large, and either of a triangular or quadrangular form, or rather inclining to a heart-shape; in others, the spots are all small, and in some degree confluent; sometimes the black predominates, sometimes the white, and there are instances of the shell being encircled with one or more distinct dark bands. Some of those shells are of unusual rarity, the ordinary varieties are to be met with in most cabinets, for the species is not uncommon in the Asiatic seas, and that kind especially which has the spots of a large size and cordated form, as represented in the annexed plate.

A shell so conspicuous and familiarly well known to every one who may have directed their attention to the subject of Conchology, it will be presumed must have assuredly attracted the observation of every writer upon the science, and it is perfectly true, that there are few works of any material extent upon Conchology in which some at least of its varieties are not noticed. Chev. Lamarck in his last publication, recapitulating the synonyms of preceding writers, reduces the number to five distinct varieties, which is one more than Gmelin has recorded; his type of the species is the *Conus Marmoreus* of all other writers, and is the kind we have delineated; he has a smaller shell in his own cabinet, which he distinguishes by the cha-

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racter *testa minore, granulata*; it differs materially in size, being little more than an inch in length, but the markings are similar, the spots in this kind being nearly as large as in the full-grown *Conus Marmoreus*, they are necessarily fewer in number and appear considerably larger in proportion. The granulations to which that author refers are disposed in circles round the shell, forming altogether about thirty equidistant granulated bands, a character of some singularity in a species which is remarkable for the smoothness and politure of its surface, if we except the variety β . of Gmelin, which is described as being finely striated, *testa subtiliter striata*, and (e) of the Lamarkian kinds. Lamarck's variety (c) *testa nigrobizonata*, is the example shewn by Rumphius and Seba, with two black zones or bands, a shell of equal size with the common variety, or type of the species. The variety (d) *testa lineis duabus albis cincta* is the kind already introduced to notice in the work of Chemnitz, and which instead of two black zones is encircled with two distinct white lines. The fifth and last variety of the species is distinguished by Lamarck as *testa maculis albis longitudinalibus subfasciata*. The novelty of this variety consists in the form and disposition of the spots of white; they are much elongated longitudinally, and are so disposed as to form about three distinct bands across the shell, besides two or three others, in which the spots are not more lengthened than in the other varieties. Lamarck has omitted to mention one character of this variety which it is material to consider, namely, the fine striæ or lines with which the shell is girt or encircled transversely.—Amidst all the apparent confusion that may be conceived to exist among the varieties of this shell it will not be forgotten that the several varieties are at once reducible to

PLATE XCVII.

their true species by attending to the specific character of the shell, the canaliculated or grooved whorl of the spire; this is a striking character, and it may be added, that the tubercles with which the spiral line is crowned will assist us likewise in the determination of the species.



ENTOMOLOGY.

PLATE C.

PAPILIO ANTIMACHUS ANTIMACHUS BUTTERFLY

UPPER SURFACE

LEPIDOPTERA.

GENERIC CHARACTER

Antennæ thicker towards the tip and generally terminating in a knob: wings erect when at rest. Fly by day.

SPECIFIC CHARACTER.

Wings indented, elongated, black; anterior pair with rufous spots: posterior ones with rufous radiated disk and black dots.

PAPILIO ANTIMACHUS: alis dentatis elongatis nigris: anticis maculis posticis disco radiato rufo nigro punctato.
Fabr. Ent. Syst. t. 3. p. 1. p. 11.—Jon. fig. pict. t. 41. fig. 1.

PLATE C.

Papilio Antimachus is a magnificent example of its tribe in point of size, and one moreover of the most remarkable, as well in the singularity of its form as beauty of its colouring, that this elegant race of insects can present; it is also extremely rare, and under the peculiar circumstances which we have to mention further, the plates which are now submitted to the reader in illustration of the species, may possibly render them of more than usual interest. It should be premised that the only authentic figure of this *Papilio* that has hitherto appeared before the public is to be found in the first plate of the third volume of Drury's work on Exotic Insects. That figure was copied from the original specimen in the cabinet of Mr. Drury, by Moses Harris, and from the many opportunities which an unreserved access to that inestimable cabinet had formerly afforded us of investigating the species, we may venture to add, that although the execution is somewhat coarse, it is by no means destitute of fidelity. In stating this, we refer, however, only to the original copies of the work published by the author, for those manufactured by the venders of the work, into whose hands the plates have fallen since his death, cannot be expected to possess the same degree of excellence as the original copies, perfected under the inspection of the author, and these are now become extremely rare. Were the scarcity of those original copies our sole inducement for the introduction of the present plates of *Papilio Antimachus* into the present work, we should rest persuaded it would be esteemed a sufficient reason, but there are others,—the pencil of Moses Harris, as an artist, was certainly surpassed by that of Mr. Jones in the delineation of this particular tribe of insects; many years of the life of Mr. Jones had been devoted to the subject, and among his numerous drawings we find two figures of this interesting species, one presenting the upper surface

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and the other the lower one ; these were copied by himself from the original insect in the cabinet of Mr. Drury, and as it appears on collating the notes of Mr. Jones with the manuscripts of Mr. Drury, now in our possession, those drawings were taken very shortly after the insect had been received in England, and previous to the drawing made for the work of Mr. Drury by Moses Harris. The work of Mr. Drury affords moreover only one figure of this insect, which is that of the upper surface ; the drawings of Mr. Jones presents us with the figure of the lower surface as well as the upper, and the difference, though not very remote, must be esteemed worthy of our attention, when the scarcity of the insect is considered.

The habitat of this species is particularly noticed by Mr. Drury ; “ I received it,” says the author, “ from Sierra Leon, in Africa,” and further adds “ that it is an undoubted non-descript.” From the manuscripts of Mr. Drury we find that he had received this insect from Mr. Smeathman in the year 1775. Among other general remarks we have also a note upon this subject from which it appears that many of the African Papiliones in the collection of Mr. Drury, were communicated by Mr. Henry Smeathman, an assiduous and very intelligent naturalist, who was stationed at that period in Sierra Leone. From the observations of Mr. Smeathman it may be imagined that this insect is not unfrequent in that particular part of Africa, but that its capture is attended with considerable difficulty, as well from the manner of its flight as the time when it appears on the wing ; it is seen only in mid-day, when every exertion under the direct influence of a vertical sun must be painful to an European. Its flight is also remarkable for its velocity, and to increase the difficulty of taking it, the insect frequents only the upper

PLATE C.

branches of the trees, from whence it darts and glances from one branch to another, and never descends nearer to the ground than the height of about eight feet. Mr. Smeathman observes also, that it turns its head about instantly to the glade or path, and will not suffer any person to approach within a "striking distance" of it, but will dart away on the least motion of the body: if the naturalist, says Mr. Smeathman, however, exerts his patience, it will at last become more familiar and careless, and is then to be caught upon some particular branch, to which it will appear more attached than to another. Independently of the unquestionable veracity of the writer, we can have no reason to doubt the accuracy of the information; the *Papilio Iris*, or Purple Emperor Butterfly of our own country, affords us precisely an example of the same instinctive caution of those beings of the insect race; this also, like *Papilio Antimachus*, frequents the higher branches of the trees, never descending nearer to the ground, and rarely so near, and in common with all the *Papiliones* when they suspect danger, turn the head; or alighting upon some bush or herbage, face the object of their distrust; and should the collector in striking with his net, miss his first aim through taking an ill-measured distance, it is not likely he should be able to succeed at that time in capturing the wary insect.

In speaking of the comparative rarity of this insect, Mr. Drury is less explicit than we could wish; he seems to consider, upon the information of Mr. Smeathman, that it is chiefly owing to the loftiness of its flight that the species is seldom taken, and is consequently scarce in cabinets: this is probably not the only cause; the haunts of insects are oftentimes very local, and this we suspect to be the fact with respect to *Papilio Antimachus*, for although the

ENTOMOLOGY.

particular spot which Mr. Smeathman visited, may have produced this insect in some plenty at the precise season when he chanced to be a resident there, it is by no means to be inferred that it is common there at other seasons, or that it is to be found in other parts of Africa. Were it only owing to the loftiness of its flight, the bag-net, in use among collectors for the capture of insects that fly principally about the higher branches of trees, would have enabled travellers, in those parts, to overcome this difficulty. The truth appears to be, that under some peculiar circumstances, this curious insect, like many others which Mr. Smeathman met with, during his travels in Africa, might have occurred to him in some plenty, and it is not improbable, for this reason it might have been in his power, at that time, to enrich several of the Entomological cabinets of Europe, with examples of the species, but for this conjecture, we have no positive confirmation, and were it even correct, we have no present knowledge of them; neither can we learn, that any specimens have been brought to Europe by subsequent observers, although half a century has elapsed since the period in which the species was communicated to Mr. Drury, by Mr. Smeathman. Indeed it may be finally observed, that the only example now extant upon which we can speak with certainty, is the original from which our present figures are taken, and this moreover is the only authority to which Fabricius adverts, for he quotes no other than the work of Drury and the drawings of Mr. Jones.





ENTOMOLOGY.

PLATE CI.

PAPILIO ANTIMACHUS

ANTIMACHUS BUTTERFLY

LOWER SURFACE

LEPIDOPTERA.

GENERIC CHARACTER

Antennæ thicker towards the tip and generally terminating in a knob: wings erect when at rest. Fly by day.

SPECIFIC CHARACTER.

Wings indented, elongated, black; anterior pair with rufous spots: posterior ones with rufous radiated disk and black dots.

PAPILIO ANTIMACHUS: alis dentatis elongatis nigris: anticis maculis posticis disco radiato rufo nigro punctato.
Fabr. Ent. Syst. t. 3. p. 1. p. 11.—Jon. fig. pict. t. 41. fig. 1.

PLATE CI.

In the preceding plate we have presented our readers with a figure of the upper surface of this singularly curious and very scarce *Papilio*; the present plate is appropriated to the representation of the lower surface, and which, on account of its extraordinary magnitude, is unavoidably represented in a resting position. As every trait of its history, so far as we are acquainted with them, are related in the preceding description, it need be only added, that the prevailing colours on the lower surface is yellow, while that of the upper surface is rufous, inclining to orange; the precise difference in the form and disposition of the spots and markings will be best perceived on an accurate comparison of the two delineations.





CONCHOLOGY.

PLATE CII.

CONUS STRIATUS

STRIATED CONE

UNIVALVE.

GENERIC CHARACTER.

Shell convolute, turbinate ; aperture effuse, longitudinal, linear, without teeth, entire at the base : pillar smooth.

* Elongated, and rounded at the base ; the cylinder twice the length of the spire, and more.

SPECIFIC CHARACTER

AND

SYNONYMS.

Shell ovate oblong, gibbous, clouded, and marked with very fine parallel striæ, which are sometimes fuscous.

CONUS STRIATUS: testa ovato-oblonga gibba nebulosa ; striis tenuissimis, parallelis fuscis. *Linn. Mus. Lud. Ulr.* 561. p. 172.—*Gmel. Linn. Syst.* 3393. n. 58.

VOLUTA TIGERINA: *Rumpf. Mus. t.* 31. f. F.

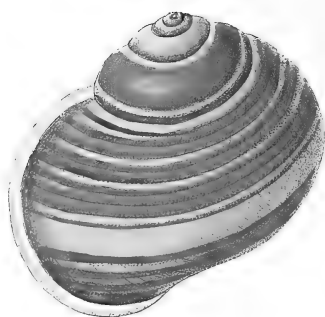
MELAR: *Adanson Senegal.* 1. t. 6. f. 2.

PLATE CII.

VOLUTA TIGRINA: *ab aliis Leo scandens.* *Seba Mus. t. 3. t. 42.*
f. 5, 6, 7, 8, 9.—Mus. Kirch. 130.—Lister
Conch. t. 760. f. 6.

CONUS STRIATUS: *d* var: *alba*; *maculis fulvis laceris araneas*
figurantibus. (L'ECORCHÉ ARAIGNÉE) *Lamarck*
t. 7. p. 506. n. 142.

A native of Africa and the type of a species of the *Conus* genus, which Linnæus describes under the name of *Conus Striatus*, from a specimen in the museum of the Queen of Sweden. This shell, which is a Cone of a moderate size, is usually of a whitish colour with a very faint tinge of violet, and has the marks almost constantly of a dark fuscous colour, tinged at the edges with testaceous. There are several varieties of this species, the difference of which consists only in the intensity of the dark fuscous markings, and in the lesser or greater space of the surface which they occupy. Among the principal varieties we may enumerate the following—
* Pale, or violaceous, with a few irregular perpendicular wavy pointed lines and ragged spots, and which have obtained it the name of the Spider Cone, from their remote resemblance to that insect.
** Pale, or White, tinged with rosy, or blueish, the surface marked with perpendicular stripes, more or less confluent.
*** Pale rosy white, or blueish, with perpendicular stripes, more or less confluent, and forming two pretty distinct bands, one towards the upper part of the shell, the other near the tip, and leaving the intermediate space as a broad whitish or paler band, surrounding the middle of the shells. In the two last mentioned varieties the darker colour prevails more conspicuously than the paler spaces.



CONCHOLOGY.

PLATE CIII.

HELIX FESTIVA

FESTIVE SNAIL

UNIVALVE.

GENERIC CHARACTER.

Shell spiral, somewhat diaphanous, brittle, aperture contracted, semilunar or roundish.

SPECIFIC CHARACTER.

Shell ovate-globose, ventricose, imperforate, sulphur-colour with fulvous rufous bands, pillar and lip rosy, tip subviolaceous.

HELIX FESTIVA : ovato-globosa, ventricosa imperforata, sulphurea fasciis fulvo-rufis columella labroque roseis, apice subviolaceo.

A most beautiful and choice species of the *Helix* genus, and one which it is presumed has hitherto remained undescribed by any

PLATE CIII.

author. In point of size, it is rather less considerable than our *Helix Pomatia*, the largest of our British *Helices*, but it is equal to, or rather exceeds, in this respect, the larger growth of the Common Garden Snail. The shell is somewhat ovate in form, globose, and ventricose; the colour a pale yellowish, or sulphureous tint, but is so closely encircled with reddish orange bands and lines, as to convey the idea of an orange-coloured shell, encircled with pale yellow lines. A broad band of the same pale yellowish tint traverses the upper or dorsal surface, just below the middle, but which becomes narrower and less conspicuous as it passes round the lower surface towards the upper segment of the lip. The margin of the lip is of a pale rosy colour, above and beneath, and the pillar of the same hue.

This shell is of extreme rarity, and may possibly be unique: it has been lately added, at a considerable price, to the conchological cabinet of Mrs. Mawe, and is introduced into the present work by her permission and kindness. The native place is unknown: we name it *Festiva* in allusion to the gaiety of its appearance.



ENTOMOLOGY.

PLATE CIV.

PAPILIO CHORINÆUS CHORINÆUS BUTTERFLY

LEPIDOPTERA.

GENERIC CHARACTER

Antennæ thicker towards the tip, and generally terminating in a knob : wings erect when at rest. Fly by day.

* NYMPHALES.

SPECIFIC CHARACTER

AND

SYNONYMS.

Wings tailed, fuscous : anterior pair falcated, with a fulvous band.

PAPILIO CHORINÆUS : alis caudatis fuscis : anticis falcatis : fascia
fulva. *Fabr. Ent. Syst. t. 3. p. 1. 72. 225.*
Seba Mus. 4 t. 41. f. 15. 16.

PAPILIO CHORINÆUS, *Jon. pict. et MS.*

PLATE CIV.

Papilio Chorinæus is an insect of singular figure and general appearance ; the anterior wings being curiously falcated, and the posterior ones furnished each with a tail of conspicuous length. The specimen from which our figures are taken, is preserved in the Banksian cabinet : the upper and lower surface are both represented in the annexed plate.

This insect is a native of Surinam ; from the MS. of the late Mr. Drury we find he had received it from that country.



CONCHOLOGY.

PLATE CV.

PERNA ISOGNOMUM

GREAT BLACK HOUND'S-EAR PERNA

BIVALVE.

GENERIC CHARACTER.

Shell subequivalve, flat, rather deformed and scaly on the outside: hinge linear, with many perpendicular teeth, which do not alternate with those of the opposite valve; the teeth placed parallel to one another, and the intermediate longitudinal spaces form each a furrow, in the interstices of which the ligament of the hinge is inserted: one side of the hinge salient, the other side under the hinge rather protuberant, gaping, and forming an avenue through which the byssus is protruded.

SPECIFIC CHARACTER

AND

SYNONYMS.

Shell equivalve with a larger lateral lobe, or having the anterior lobe produced.

PERNA ISOGNOMUM: testa equivalvi: lobo laterali majore.

PLATE CV.

OSTREA ISOGNOMUM : testa equivalvi : lobo laterali majore.

Linn. Lud. Ulr. 533. n. 120.—*Gmel. Syst. Nat.*

3338. 124.—*Seba Mus.* 3 t. 91. f. 7.

PERNA ISOGNOMUM : testa compressa, superne in alam curvatam

vel obliquam elongata ; basi transversa, prelonga,

in rostrum anterius producta. *Lamarck Anim.*

sans Verteb. t. 6. p. 1. p. 140.

Notwithstanding that the figures of several varieties of this curious shell are to be found in the works of Seba, Rumphius, Klein and other early writers, it has ever been considered as a scarce shell. Gmelin observes, in speaking of its being an inhabitant of the Indian Ocean, "habitat rarior et pretiosa in Oceano Indico." Our specimen is from the South Seas, one of the finest and most choice examples among those which were brought to England by the celebrated Captain Cook, and which was presented by that eminent navigator to Sir Ashton Lever: it is probably the most perfect and illustrative specimen of the species known, for in all the figures which we have seen, the larger extremity appears broken and more pointed, while in the present shell it is dilated, and forms a rounded instead of pointed termination. This shell is known among English collectors by the name of the Great Black Hound's-ear, and sometimes the Australasian Black Hound's-ear; the French distinguish it by the name of *Perne bigorne*.

CONCHOLOGY.

This remarkable shell bears some resemblance to that singular Conchological production, the Hammer-Oyster, from which it, however, differs in having the anterior lobe at the upper part of the shell shorter, and in being nearly destitute of the opposite, or corresponding lobe. Still they may possibly be mistaken, unless due attention be paid to the structure of the hinges, for in that particular no two shells can be more remote. The sulcations of the hinge in our present species are especially characteristic.



CONCHOLOGY.

PLATE CVI.

SOLENI VIRIDI-ÆNEUS

BRASSY-GREEN SOLENI

BIVALVE.

GENERIC CHARACTER.

Shell oblong, open at both ends : hinge with a subulate reflected tooth, often double, and not inserted in the opposite valve.

* Hinge placed in the middle of the shell.

SPECIFIC CHARACTER.

Shell oval-oblong, somewhat cylindrical, straight, with the ends slightly rounded : white, in the middle brassy green ; hinge of one valve bidentated.

SOLENI VIRIDI-ÆNEUS: testa ovali-oblonga subcylindracea recta, extremitatibus subrotundatis, alba in medio viridi-æneo, cardine altero bidentato.

PLATE CVI.

This remarkable kind of the Solen tribe appears to be entirely new, or at least it does not occur in any of the continental works within our present knowledge. It is a native of the sandy shores in the vicinity of the Gold Coast, near Cape Coast Castle, from whence a number of them have been very recently sent to England by an individual of the British force engaged in the hostilities with the Ashantees; whether it is met with on any other of the African shores we are not informed.

This shell, which is represented in its natural size, is about three inches broad and one in length, straight and somewhat convex or inclining to cylindrical, with the ends obtusely rounded, the colour within white; the outside is also white, but is very closely covered with a thin epidermis, which is of a rich golden or brassy green colour throughout, except at the anterior and posterior slopes, which are of a pale whitish tint, and render its appearance in a peculiar degree remarkable.



ENTOMOLOGY.

PLATE CVII.

PAPILIO BERENICE

BERENICE BUTTERFLY

ORDER

LEPIDOPTERA.

GENERIC CHARACTER

Antennæ thicker towards the tip, and usually terminating in a kind of club : wings erect when at rest. Fly by day.

SPECIFIC CHARACTER

AND

SYNONYMS.

Wings indented, black, with a common red band : posterior pair beneath spotted with black, white, ferruginous and yellow.

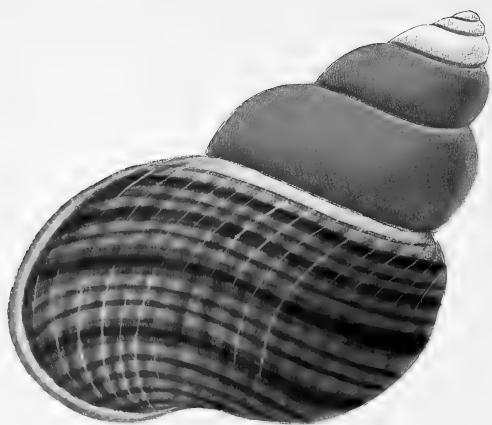
PAPILIO BERENICE: alis dentatis nigris : fascia communi rubra, posticis subtus nigro albo ferrugineo flavoque maculatis. *Fabr. Ent. Syst. t. 3. p. 1. n. 350,*

PLATE CVII.

A very elegant species of the *Papilio* tribe, one of the family of *Nymphales Phalerati* in the Linnæan arrangement, and of the *Nymphales* in that of Fabricius. The figures given in the annexed plate, and which exhibit as well the upper as the lower surface, are taken from a specimen in the cabinet of the late Sir Joseph Banks. There was another example of this insect in the cabinet of Mr. Drury, and it was also known to the German naturalist Cramer, who has described it under the name of *Papilio Zingha*.

Papilio Berenice is an insect of moderate magnitude; the general colour above is dark brown, with a broad common band of rufous orange across the middle, and a row of reddish dots, disposed in pairs, and forming an elegant series along the dark posterior limb of the lower wings. The under surface is no less elegant, the ground colour consisting of large distinct patches of brown, red and black, the lighter spaces of which are diversified with black dots, and the black with spots and dashes of white or pale red.

This curious butterfly is very rare; its native place is *Sierra Leone*. From the MS. of Mr. Drury we learn that he received it in the year 1776, from Mr. Smeathman, by whom it had been found in that part of Africa.



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PLATE CVIII.

HELIX PYTHOGASTER

PYTHOGASTER SNAIL

UNIVALVE.

GENERIC CHARACTER.

Shell spiral, somewhat diaphanous, brittle, aperture contracted, semilunar, or roundish.

SPECIFIC CHARACTER

AND

SYNONYMS.

Shell imperforate, ovate conoid, chesnut-brown, very finely striated longitudinally, whorls six, roundish, the first ventricose, with dusky or fuscous bands : lip within white : margin reflected.

HELIX PYTHOGASTER : testa imperforata ovato-conoidea, castanea, longitudinaliter subtilissime striata, anfractibus sex teretibus primo ventricoso, cingulis fuscatis : labro intus albo, margine reflexo.

PLATE CVIII.

BULIMUS PYTHOGASTER: Bulime des Philippines. *Lamarck*
Anim. s. Vert. t. 6. p. 2. 119. 10.

HELIX PITHOGASTER: *Ferrusac's Conch. pl. cviii. fig. No. 3.*

This shell, which is of considerable rarity, exists in the valuable and extensive cabinet of Mrs. Mawe, who has liberally permitted the present figures to be copied from it for the purpose of our publication. We cannot indeed produce the shell as an undescribed species; for it has been already noticed in the respective works of Chev. Lamarck and Baron Ferrusac, but it must be nevertheless considered as an important acquisition, and one that cannot fail, it is presumed, to prove acceptable, in particular, to that portion of our readers who are interested in the study of Conchology.

It is not unworthy of remark, that this species, which was not described by Lamarck till the year 1822, had previously to that time for many years formed a part of the private cabinet of Mr. George Humphrey, an eminent collector in this country, and that it appears prior to the publication of Lamarck's Conchology to have been entirely unknown. This author informs us that the species inhabits the Philippine Isles. He refers to the cabinet of M. le Marquis de Bonay for the example mentioned, and observes at the same time that it is a very distinct species, and probably very rare; the length of his shell is one inch and eleven lines, which is scarcely half the size of the example now before us. The shell described by Baron Ferrusac is larger than that given by Chev. Lamarck, but it is still

CONCHOLOGY.

smaller than that which we have delineated. The shell described by B. Ferrusac is supposed to be a native of America; we are entirely uncertain as to the habitat of the specimen which we describe.

The figures in the annexed plate being copied in the natural size, and with every attention to accuracy from the example before us, it will, it is presumed, be deemed unnecessary to enter into any very minute description of the shell; we shall, however, quote the description given of the same species by Baron Ferrusac, for the satisfaction of those who may wish to compare it with the figures we have given*. We have already stated that our example is larger than that of Baron Ferrusac; it may be also added, that its general aspect is more dusky or obscure, and the bands of fuscous which encircle the first whorl, in particular, less distinctly defined than in the shell before us.

* Coquille alongée et ventrue, volute développée dans le sens vertical, spire élevée, tours croissant fortement, bord intérieur, du cône spiral formant une columelle solide, torse non tronquée; bouche plus ou moins verticale par rapport à l'axe; bord extérieur plus ou moins avancé; peristome simple en réfléchi. H. Pithogaster. No. 324. pl. cviii, f. 3.







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